1: Place Value

In 3.20, in which place is the 2?

In 4.592, what digit is in the thousandths place?

In 14.68, the digit 1 is in what place?

In 16.0428, in what place is the 2?

In 0.582, what digit is in the hundredths place?

1: Place Value

In 3.20, in which place is the 2?

Tenths

In 4.592, what digit is in the thousandths place?

2

In 14.68, the digit 1 is in what place?

Tens

In 16.0428, in what place is the 2?

Thousandths

In 0.582, what digit is in the hundredths place?

8

2: Rounding

Round 4.532 to the nearest whole number

Round 7.517 to the nearest tenth

Round 189 to the nearest tens

Round 0.6743 to the nearest hundredth

Round 13.063 to the nearest tenth

2: Rounding

Round 4.532 to the nearest whole number

5

Round 7.517 to the nearest tenth

7.5

Round 189 to the nearest tens

190

Round 0.6743 to the nearest hundredth

0.67

Round 13.063 to the nearest tenth

13.1

3: Decimal Word Names

Write the decimal from the words

Zero and five thousandths

Sixteen and fifty-six hundredths

Four and seven hundred twelve thousandths

One and fourteen ten-thousandths

Six and one tenth

3: Decimal Word Names

Write the decimal from the words

Zero and five thousandths

0.005

Sixteen and fifty-six hundredths

16.56

Four and seven hundred twelve thousandths

4.712

One and fourteen ten-thousandths

1.0014

Six and one tenth

6.1

4: Conversions

If 5 boxes weigh 12 pounds, how much does 9 boxes weigh?

Jimmy types 14 words in 5 seconds. How many words can he type in 2 minutes?

If 3 inches = 7.62 centimeters. How many inches is 20 cm? *Round to the nearest hundredth.*

4: Conversions

If 5 boxes weigh 12 pounds, how much does 9 boxes weigh?

boxes / pounds

$$\frac{5}{12} = \frac{9}{x}$$

$$\frac{108}{5} = \frac{5x}{5}$$

$$21.6 = x$$

$\boxed{21.6 \text{ pounds}}$

Jimmy types 14 words in 5 seconds. How many words can he type in 2 minutes?

14 words in 5 sec

×2 ↓ ×2

28 words in 10 sec

×6 ↓ ×6

168 words in 60sec (1 min)

×2 ↓ ×2

336 words in 120sec (2 min)

If 3 inches = 7.62 centimeters. How many inches is 20 cm? *Round to the nearest hundredth.*

in / cm

$$\frac{3}{7.62} = \frac{x}{20}$$

$$\frac{7.62x}{7.62} = \frac{60}{7.62}$$

$$x = 7.87 \text{ in}$$

5: Ratio Problems

The ratio of boys to girls in 8^{th} grade class is 3:4. If there are 104 girls, how many boys are there?

There are 72 total markers and pens in a box. If the ratio of markers to pens is 2:7 how many pens are in the box?

Are the ratios 12:15 and 24:30 proportional? *Justify mathematically.*

5: Ratio Problems

The ratio of boys to girls in 8^{th} grade class is 3:4. If there are 104 girls, how many boys are there?

B | 26 | 26 | 26 | ← $26 \cdot 3 = \boxed{78 \text{ boys}}$

G | 26 | 26 | 26 | 26 | = 104

There are 72 total markers and pens in a box. If the ratio of markers to pens is 2:7 how many pens are in the box?

M | 8 | 8 |

P | 8 | 8 | 8 | 8 | 8 | 8 | 8 |

72 Total

$\boxed{56 \text{ Pens}}$

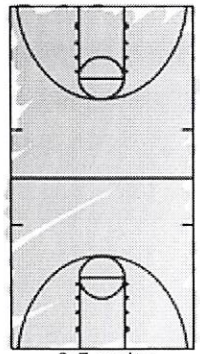
Are the ratios 12:15 and 24:30 proportional? *Justify mathematically.*

$$\frac{12}{15} \overset{?}{=} \frac{24}{30} \quad (\times 2)$$

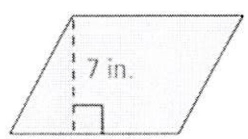
Yes!

6: Scaling Dimensions

A school used the scale drawing to plan for a basketball court in the gym. If the longer length of the court needs to be 74 feet, what will the shorter width be?

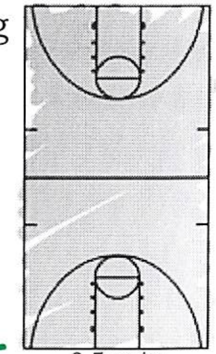


The sketch of a deck is below. If 2 in. = 5 ft., find the area in square feet of the deck.



6: Scaling Dimensions

A school used the scale drawing to plan for a basketball court in the gym. If the longer length of the court needs to be 74 feet, what will the shorter width be?



Length / Width

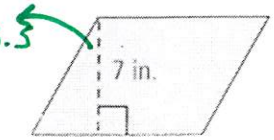
$$\frac{6 \text{ units}}{3.5 \text{ units}} = \frac{74 \text{ ft}}{x}$$

$$\frac{259}{6} = \frac{6x}{6}$$

$$\boxed{43.2 \text{ ft} = x}$$

The sketch of a deck is below. If 2 in. = 5 ft., find the area in square feet of the deck.

×3.5 (2 in = 5 ft; 7 in = 17.5 ft) ×3.5



$A = b \cdot h$

×5 (2 in = 5 ft; 10 in = 25 ft) ×5

$A = 25 \text{ ft} \cdot 17.5 \text{ ft}$

$\boxed{A = 437.5 \text{ ft}^2}$

7: Equations from Tables

Write an equation that models the data in the table.

Days (x)	Gallons of Milk (y)
2	24
3	36
4	48
6	

Number of Songs (x)	Length in minutes (y)
3	13.5
6	27
9	40.5
12	54

Bill types 45 words in 30 seconds. Write an equation to represent how many words y, Bill can type in x minutes.

7: Equations from Tables

Write an equation that models the data in the table.

Days (x)	Gallons of Milk (y)
2 x12	24
3 x12	36
4 x12	48
6 x12	72

$x \cdot 12 = y$

Number of Songs (x)	Length in minutes (y)
3 x4.5	13.5
6 x4.5	27
9 x4.5	40.5
12 x4.5	54

$\frac{13.5}{3} = 4.5$

$x \cdot 4.5 = y$

Bill types 45 words in 30 seconds. Write an equation to represent how many words y, Bill can type in x minutes.

x2 45 words in 30 sec x2

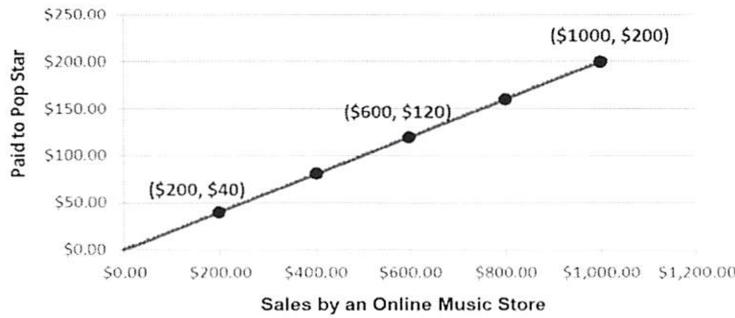
90 words in 60 sec (1 min)

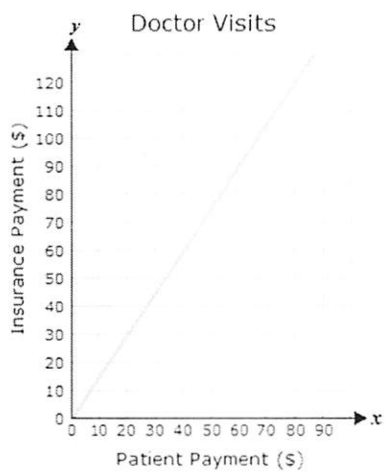
$90 \cdot m = w$

$\boxed{90 \cdot x = y}$

8: Equations from Graphs

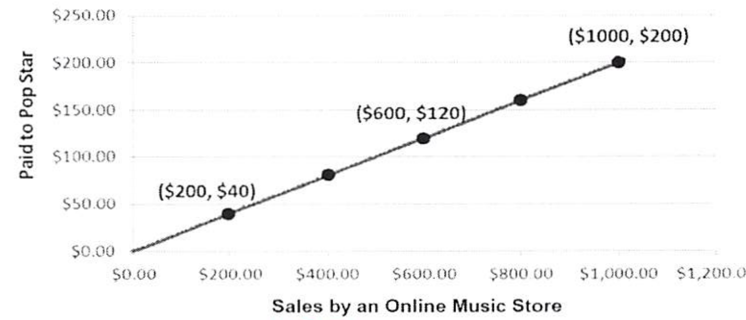
Write an equation that models the data in the graph.





8: Equations from Graphs

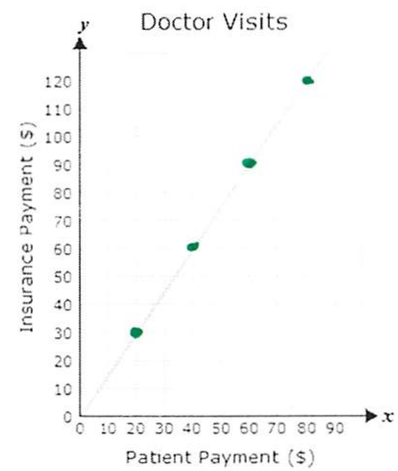
Write an equation that models the data in the graph.



$$\frac{\$\text{ Paid}}{\text{Sales}} = \frac{120}{600} = \frac{1}{5} \qquad \boxed{y = \frac{1}{5} \cdot x}$$

or

$$y = x \div 5$$



$$\frac{\text{Insurence}}{\$\text{ Patient}} \qquad \frac{30}{20} = 1.5 \qquad \boxed{y = 1.5 \cdot x}$$

9: Tax, Tip, Discount

Subtotal for Food: $43.25
Find the Total with 8% sales tax.

Shirts cost $15. Find the total cost of 3 shirts with a 20% off coupon.

The total bill at a restaurant was $34.50. Jesse left $40.71 on the table to cover the bill and tip. What percent of the total bill did Jesse leave for the tip?

9: Tax, Tip, Discount

Subtotal for Food: $43.25
Find the Total with 8% sales tax.

$$\frac{8}{100} = \frac{x}{43.25}$$

$$\frac{100x}{100} = \frac{346}{100}$$

$$x = \$3.46$$

$$\begin{array}{r} \$43.25 \\ +\ 3.46 \\ \hline \boxed{\$46.71} \end{array}$$

Shirts cost $15. Find the total cost of 3 shirts with a 20% off coupon.

3 shirts = $45

$$\frac{20}{100} = \frac{x}{45}$$

$$\frac{100x}{100} = \frac{900}{100}$$

$$x = 9$$

$$\begin{array}{r} \$45 \\ -\ 9 \\ \hline \boxed{\$36} \end{array}$$

The total bill at a restaurant was $34.50. Jesse left $40.71 on the table to cover the bill and tip. What percent of the total bill did Jesse leave for the tip?

Tip = $40.71 − $34.50 = $6.21

$$\frac{x}{100} = \frac{\$6.21}{34.50}$$

$$\frac{621}{34.50} = \frac{34.50x}{34.50}$$

$$\boxed{x = 18\%\ \text{Tip}}$$

10: Is/Of Percent Problems

What is 30% of 16?

75 is what percent of 135?

150% of what number is 32

10: Is/Of Percent Problems

$\frac{\%}{100} = \frac{is}{of}$

What is 30% of 16?

$\frac{30}{100} = \frac{x}{16}$

$\frac{100x}{100} = \frac{480}{100}$

$\boxed{x = 4.8}$

75 is what percent of 135?

$\frac{x}{100} = \frac{75}{135}$

$\frac{7500}{135} = \frac{135x}{135}$

$\boxed{55.\overline{5}\% = x}$

150% of what number is 32

$\frac{150}{100} = \frac{32}{x}$

$\frac{3200}{150} = \frac{150x}{150}$

$\boxed{21.\overline{3} = x}$

11: Add and Subtract Rationals

$12-30+|-17|$

$-\frac{2}{3}-\frac{3}{4}$

$6.2-(-3.7)-\left|\frac{1}{2}\right|$

11: Add and Subtract Rationals

$12-30+\underbrace{|-17|}$

$\underbrace{12-30}+17$

$\underbrace{-18+17}$

-1

$-\frac{2}{3}-\frac{3}{4}$

$-\frac{8}{12}-\frac{9}{12}=-\frac{17}{12}=\boxed{-1\frac{5}{12}}$

$6.2\cancel{-(}-3.7)-\left|\frac{1}{2}\right|$

$\underbrace{6.2+3.7}-\overbrace{0.5}$

$\underbrace{9.9-0.5}$

9.4

12: Add and Subtract Mixed Numbers

Put your final answer in lowest terms

$$2\frac{1}{3} - 4\frac{2}{3}$$

$$-6\frac{3}{8} + 2\frac{1}{4} =$$

$$10\frac{4}{5} + \left|-1\frac{1}{10}\right| =$$

12: Add and Subtract Mixed Numbers

Put your final answer in lowest terms

$$2\frac{1}{3} - 4\frac{2}{3}$$

$$\frac{7}{3} - \frac{14}{3} = -\frac{7}{3} = \boxed{-2\frac{1}{3}}$$

$$-6\frac{3}{8} + 2\frac{1}{4} =$$

$$-\frac{51}{8} + \frac{9}{4}$$

$$-\frac{51}{8} + \frac{18}{8} = -\frac{33}{8} = \boxed{-4\frac{1}{8}}$$

$$10\frac{4}{5} + \left|-1\frac{1}{10}\right| =$$

$$\frac{54}{5} + \frac{11}{10}$$

$$\frac{108}{10} + \frac{11}{10} = \frac{119}{10} = \boxed{11\frac{9}{10}}$$

13: Multiply and Divide Rationals

$(-2)(3)(-5)(-4)$

$6\left(-3\dfrac{1}{4}+5\right)$

$\dfrac{8 \bullet -3}{-4}$

13: Multiply and Divide Rationals

$\underbrace{(-2)(3)}(-5)(-4)$

$\underbrace{-6 \cdot (-5)}(-4)$

$\underbrace{30(-4)}$

-120

$6\left(-3\dfrac{1}{4}+5\right)$

$6 \bullet -3\frac{1}{4} + 30$

$\frac{6}{1} \bullet -\frac{13}{4}$

$\frac{-78}{4} + 30$

$-19\frac{1}{2} + 30 = \boxed{10\frac{1}{2}}$

$\dfrac{8 \bullet -3}{-4}$

$\dfrac{-24}{-4} = \boxed{6}$

14: Multiply and Divide Mixed Numbers

<u>Put your final answer in lowest terms</u>

$-4 \div \frac{1}{8} =$

$-3\frac{1}{2} \times -\frac{2}{7} =$

$$\frac{2\frac{2}{5}}{1\frac{3}{7}} =$$

14: Multiply and Divide Mixed Numbers

<u>Put your final answer in lowest terms</u>

$-4 \div \frac{1}{8} =$

$\frac{-4}{1} \cdot \frac{8}{1} = \frac{-32}{1} = \boxed{-32}$

$-3\frac{1}{2} \times -\frac{2}{7} =$

$\frac{-\cancel{7}}{\cancel{2}} \cdot -\frac{\cancel{2}}{\cancel{7}} = \boxed{1}$

$$\frac{2\frac{2}{5}}{1\frac{3}{7}} =$$

$2\frac{2}{5} \div 1\frac{3}{7}$

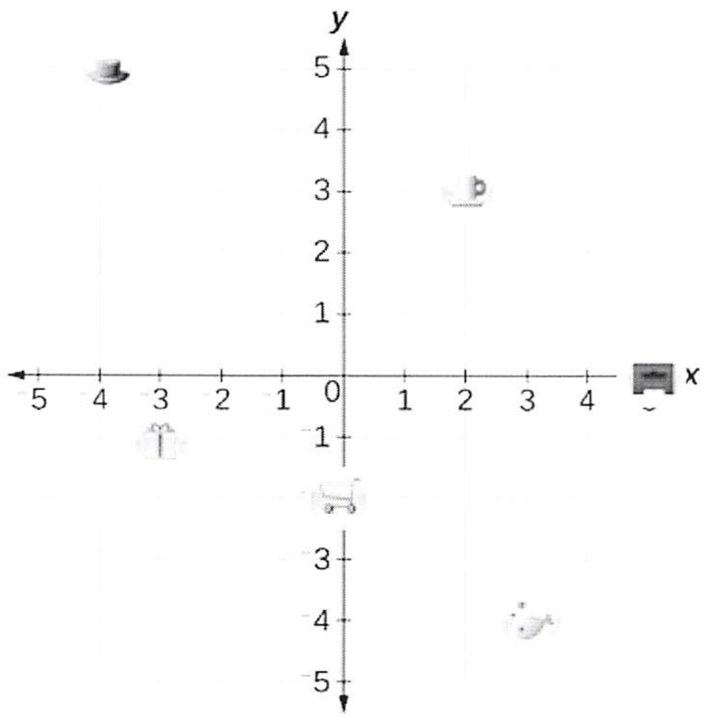
$\frac{12}{5} \div \frac{10}{7}$

$\frac{\cancel{12}^{6}}{5} \cdot \frac{7}{\cancel{10}_{5}} = \frac{42}{25} = \boxed{1\frac{17}{25}}$

15: Graphing Points

Write the Coordinate for each Picture

(x , y)



coffee shop

magic shop

gift shop

pet store

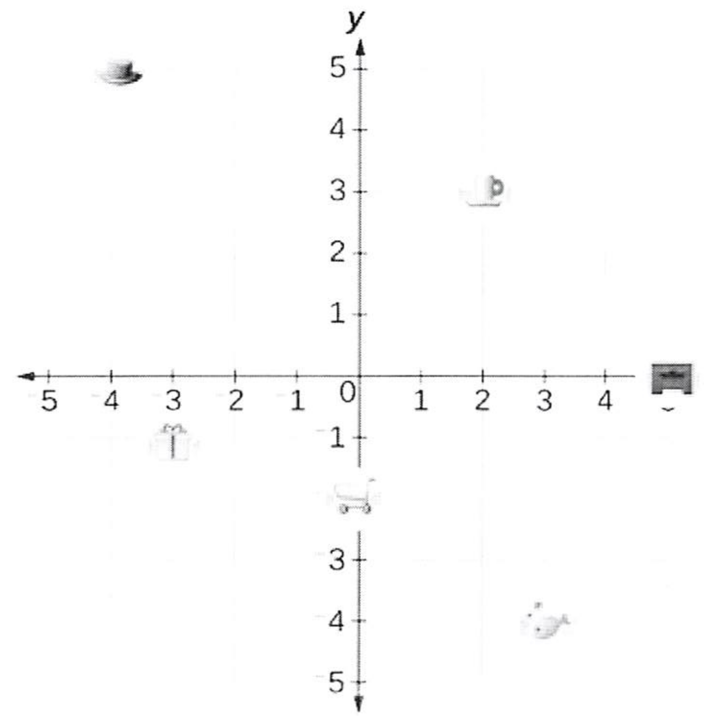
grocery store

theater

15: Graphing Points

Write the Coordinate for each Picture

(x , y)



coffee shop (2, 3)

magic shop (-4, 5)

gift shop (-3, -1)

pet store (3, -4)

grocery store (-2, 0)

theater (5, 0)

16: Order of Operations

$$-4+5(-6)-\frac{36}{-2}$$

$$-3\left((-4)^2-12\right)^3$$

If $x=-5$ and $y=-2$, evaluate

$$\frac{-5xy-yx}{(x-y)^2}$$

16: Order of Operations

$$-4+5(-6)-\frac{36}{-2}$$

$$-4+5(-6)-(-18)$$

$$-4-30+18$$

$$-34+18$$

$$-16$$

$$-3\left((-4)^2-12\right)^3$$

$$-3\cdot(16-12)^3$$

$$-3\cdot(4)^3$$

$$-3\cdot 64$$

$$-192$$

If $x=-5$ and $y=-2$, evaluate

$$\frac{-5xy-yx}{(x-y)^2} \rightarrow -5(-5)(-2)-(-2)(-5)$$

$$-50-10$$

$$-60$$

$\downarrow$

$$(-5-(-2))^2$$

$$(-3)^2$$

$$9$$

$$=\frac{-60}{9}=-6\frac{6}{9}=\boxed{-6\frac{2}{3}}$$

17: Combining Like Terms

$3x-2y+7x-8y+3x-12x+4y$

$\left(-4a+6b\right)-\left(4b-7a\right)$

$3x^2+x^3-9x-\left(-3x^3\right)+15x^2-\left(-12x\right)+\left(2x\right)^2$

17: Combining Like Terms

$\boxed{3x}-2y\boxed{+7x}-8y\boxed{+3x}\boxed{-12x}+4y$

$x-6y$

$\left(-4a+6b\right)-\left(4b-7a\right)$

$\boxed{-4a}+6b-4b\boxed{+7a}$

$3a+2b$

$\boxed{3x^2}+x^3-9x\cancel{-}(-3x^3)\boxed{+15x^2}\cancel{-}(-12x)+\left(2x\right)^2$

$\boxed{4x^2}$

$4x^3+22x^2+3x$

18: Equations from Words

Write an equation from the word statement

Six less than seven times a number is 22.

Four times the quantity of 8 and the quotient of x and 12 totals 100.

You buy c pounds of cherries for \$2.95 per pound and a bag of potatoes for \$4.99. The total is \$13.25.

18: Equations from Words

Write an equation from the word statement

$6 \quad - \quad 7 \quad \cdot \quad x \quad = 22$

Six less than seven times a number is 22.

$$\boxed{7x - 6 = 22}$$

$4 \quad \cdot \quad (\quad 8 \quad + \quad \text{plus} \quad \frac{x}{12} \quad)$

Four times the quantity of 8 ~~and~~ the quotient of x and 12 totals 100.

$= \quad 100$

$$\boxed{4 \cdot \left(8 + \frac{x}{12}\right) = 100}$$

You buy c pounds of cherries for \$2.95 per pound and a + bag of potatoes for \$4.99. The total is \$13.25.

$$\boxed{\$2.95 \cdot c + \$4.99 = \$13.25}$$

19: Inequalities from Words

Write an inequality from the word statement

x is at least 14

The difference of x and 7 is no more than 5

The sum of a number squared and 12 exceeds 18

The length of a rectangle is 20 and the width is $x+5$. The area is less than 200

19: Inequalities from Words

Write an inequality from the word statement

$\geq$

x is at least 14

$$\boxed{x \geq 14}$$

$x \quad - \quad 7 \quad \leq \quad 5$

The difference of x and 7 is no more than 5

$$\boxed{x - 7 \leq 5}$$

$+ \quad n \quad {}^2 \quad + \quad 12$

The sum of a number squared and 12 exceeds 18

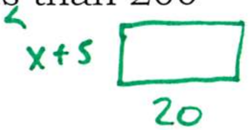
$> \quad 18$

$$\boxed{n^2 + 12 > 18}$$

The length of a rectangle is 20 and the width is $x+5$. The area is less than 200

$<$

$$\boxed{20 \cdot (x+5) < 200}$$



20: Solving Equations

Solve	Check
$24-4y=10$	

Solve	Check
$21=-3(x+6)$	

20: Solving Equations

Solve	Check
$24-4y=10$ $-24 \quad -24$ $-4y=-14$ $\frac{-4y}{-4}=\frac{-14}{-4}$ $\boxed{y=3.5}$	E: $24-4y=10$ S: $24-\underbrace{4\cdot(3.5)}=10$ S: $\underbrace{24-14}=10$ $10=10$ ✓

Solve	Check
$21=-3(x+6)$ $21=-3x-18$ $+18 \quad +18$ $39=-3x$ $\frac{39}{-3}=\frac{-3x}{-3}$ $\boxed{-13=x}$	E: $21=-3(x+6)$ S: $21=-3(\underbrace{-13+6})$ S: $21=\underbrace{-3(-7)}$ $21=21$ ✓

21: Solving Inequalities

Solve

$-2x+5<19$

Check

Choose 1 number that is in the solution set and check

Solve

$\frac{x}{3}+4\le -2$

Circle the numbers that are in the solution set.

18   -72   -12

-18   -19

-17.5 $-20\frac{1}{4}$

21: Solving Inequalities

Solve

$-2x+5<19$

$-5 \mid -5$

$\frac{-2x}{-2} < \frac{14}{-2}$

$\boxed{x > -7}$

Check

Choose 1 number that is in the solution set and check

Choose 5

E: $-2x+5<19$

S: $\underbrace{-2\cdot 5}+5<19$

$\underbrace{-10+5}<19$

$-5<19$ ✓

Solve

$\frac{x}{3}+4\le -2$

$-4 \mid -4$

$3\cdot\frac{x}{3} \le -6\cdot 3$

$\boxed{x \le -18}$

Circle the numbers that are in the solution set.

18   -72   -12

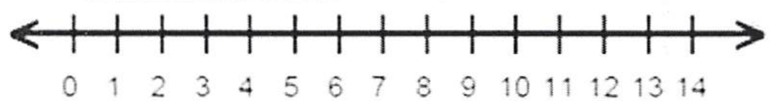
-18   -19

-17.5 $-20\frac{1}{4}$

22: Graphing Inequalities

Write the inequality from the graph or graph the inequality.

$v \geq 12$



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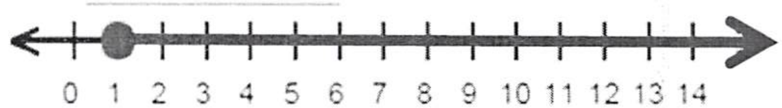

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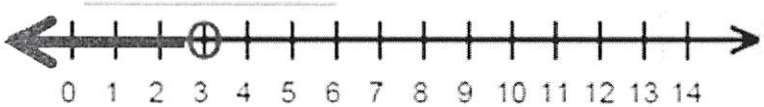
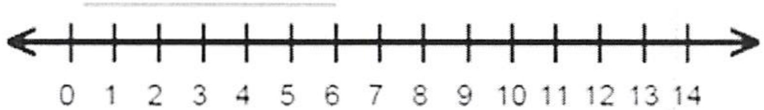
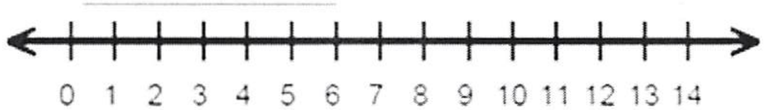


$3 \geq w$



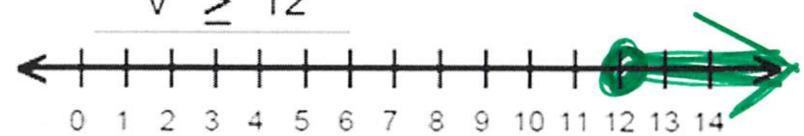
$x > 7$



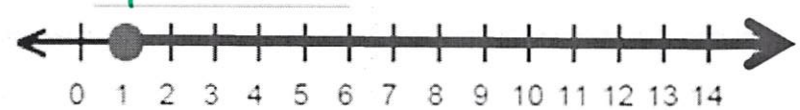
22: Graphing Inequalities

Write the inequality from the graph or graph the inequality.

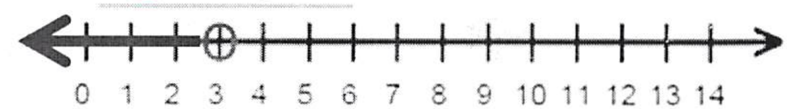
$v \geq 12$



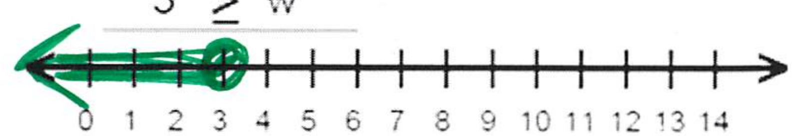
$1 \leq p$



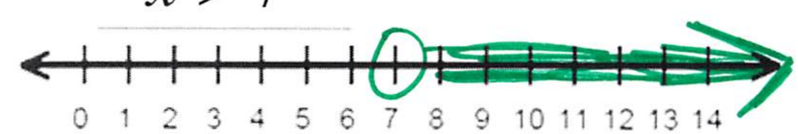
$3 > j$



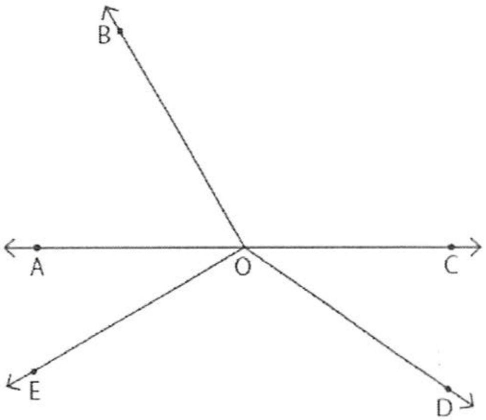
$3 \geq w$



$x > 7$



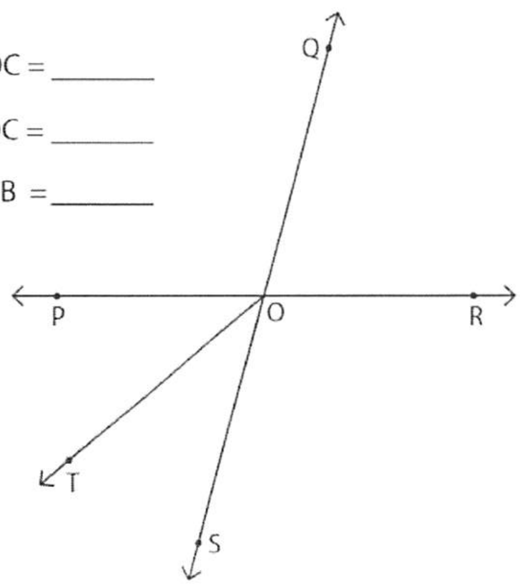
23: Finding Angles



∠BOE = 90° ∠BOC = ______

∠AOE = 30° ∠EOC = ______

∠DOE = 115° ∠AOB = ______

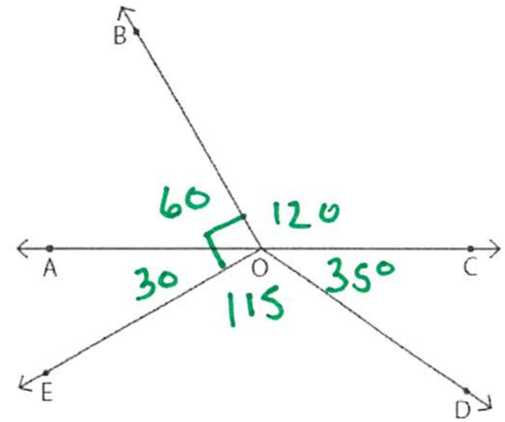


∠POT = 40° ∠TOS = ______

∠QOR = 75° ∠POQ = ______

∠SOR = 105° ∠QOT = ______

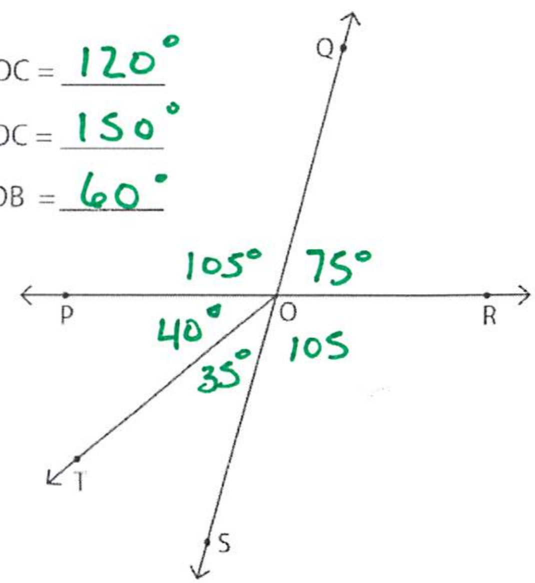
23: Finding Angles



∠BOE = 90° ∠BOC = 120°

∠AOE = 30° ∠EOC = 150°

∠DOE = 115° ∠AOB = 60°

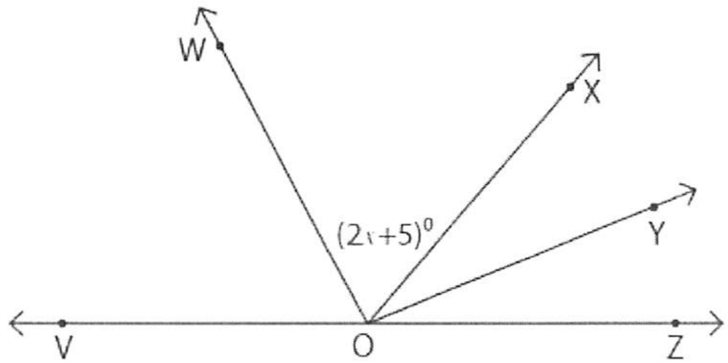


∠POT = 40° ∠TOS = 35°

∠QOR = 75° ∠POQ = 105°

∠SOR = 105° ∠QOT = 145°

24: Finding Angles with Algebra



$\angle WOY = 90^\circ$
$\angle XOZ = 50^\circ$
$\angle WOV = 70^\circ$

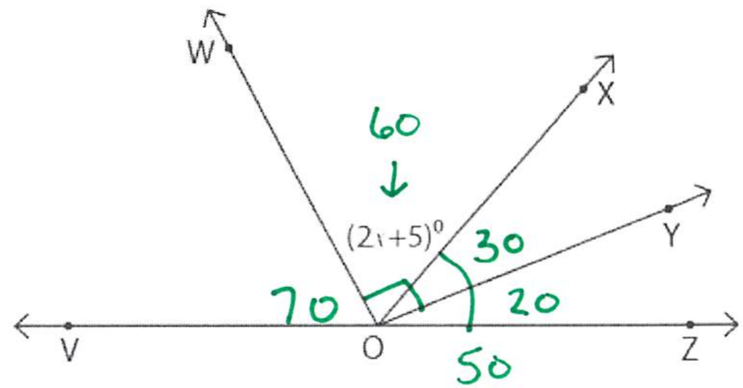
$x =$ __________

$\angle WOX =$ __________

$\angle XOY =$ __________

$\angle YOZ =$ __________

24: Finding Angles with Algebra



$\angle WOY = 90^\circ$
$\angle XOZ = 50^\circ$
$\angle WOV = 70^\circ$

$x =$ 27.5 ←

$$2x+5 = 60$$
$$-5 \quad -5$$
$$\frac{2x}{2} = \frac{55}{2}$$
$$x = 27.5$$

$\angle WOX =$ 60°

$\angle XOY =$ 30

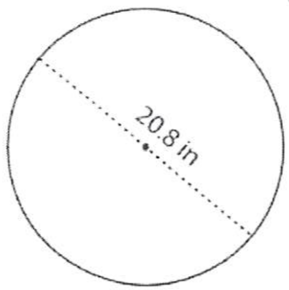
$\angle YOZ =$ 20

25: Area of Circles

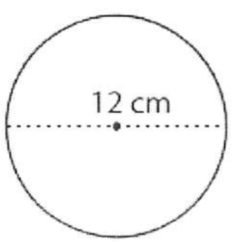
(Calculator)

Use the following formula to help Calculate the Area of the following Circles *to the nearest hundredth.*

$$A = \pi r^2$$



Find the Area of the Circle *in terms of* π.

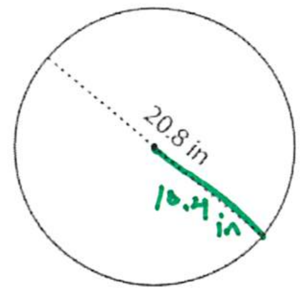


25: Area of Circles

(Calculator)

Use the following formula to help Calculate the Area of the following Circles *to the nearest hundredth.*

$$A = \pi r^2$$



$A = \pi r^2$

$A = \pi \cdot (10.4)^2$

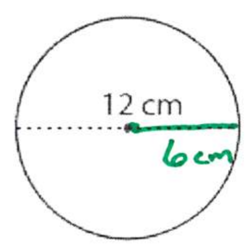
$\boxed{A = 339.79 \text{ in}^2}$

$A = \pi r^2$

$A = \pi (7.33)^2$

$\boxed{A = 168.79 \text{ in}^2}$

Find the Area of the Circle *in terms of* π.



$A = \pi r^2$

$A = \pi \cdot 6^2$

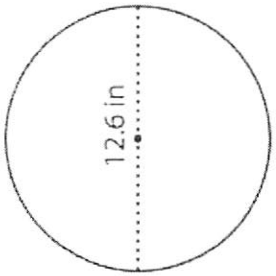
$\boxed{A = 36\pi \text{ cm}^2}$

26: Circumference of Circles

(Calculator)

Use the following formula to help Calculate the Circumference of the following Circles *to the nearest hundredth.*

$$C = 2\pi r$$



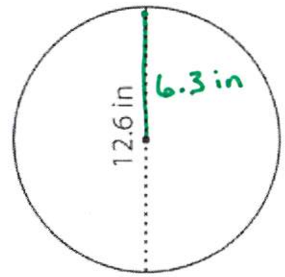
A circle has a circumference of 39.82 ft. What is the diameter of the circle *to the nearest hundredth of a foot?*

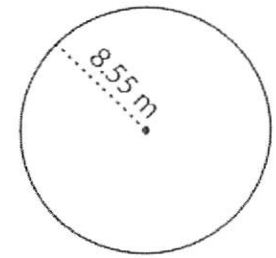
26: Circumference of Circles

(Calculator)

Use the following formula to help Calculate the Circumference of the following Circles *to the nearest hundredth.*

$$C = 2\pi r$$





$C = 2 \cdot \pi \cdot 6.3$

$C = 39.58$ in

$C = 2 \cdot \pi \cdot 8.55$

$C = 53.72$ m

A circle has a circumference of 39.82 ft. What is the diameter of the circle *to the nearest hundredth of a foot?*

$C = 39.82$ ft

$\frac{39.82}{2\pi} = \frac{2 \cdot \pi \cdot r}{2\pi}$

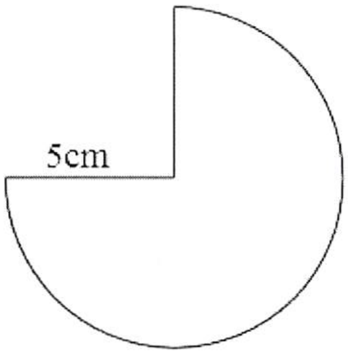
$\boxed{6.34 \text{ ft} = r}$

27: Circles

(Calculator)

Use the following formulas to help Calculate the following *to the nearest hundredth.*

$A = \pi r^2$ $\quad C = 2\pi r$



Area = ____________

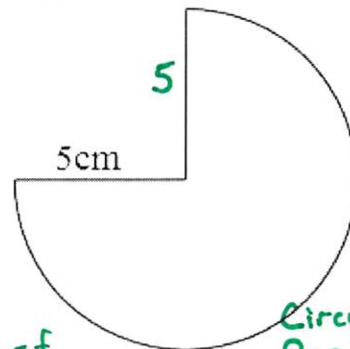
Perimeter = ____________

27: Circles

(Calculator)

Use the following formulas to help Calculate the following *to the nearest hundredth.*

$A = \pi r^2$ $\quad C = 2\pi r$



Area → 3/4 of Circle

$A = \pi \cdot 5^2$

$A = \pi \cdot 25$

$A = 78.54 \text{ cm}^2$

$\times \frac{3}{4} =$

Area = 58.90 cm^2

Circumference Perimeter = 3/4 of Circle + 10

$C = 2\pi r$

$C = 2\pi \cdot 5$

$C = 31.42$

$\times \frac{3}{4}$

$= 23.56$

$+10$

$= 33.56$

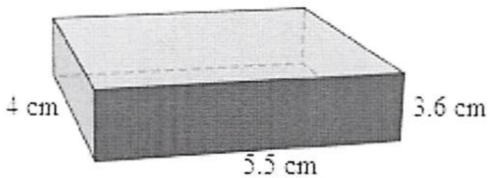
Perimeter = 33.56 cm

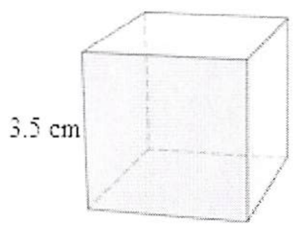
28: Volume I

(Calculator)

Use the following formula to help Calculate the Volume of the following *to the nearest hundredth.*

$$V = l \bullet w \bullet h$$



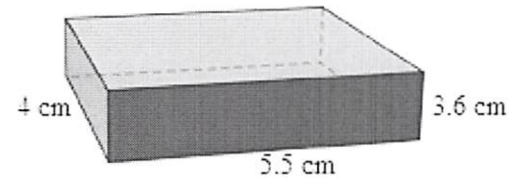


28: Volume I

(Calculator)

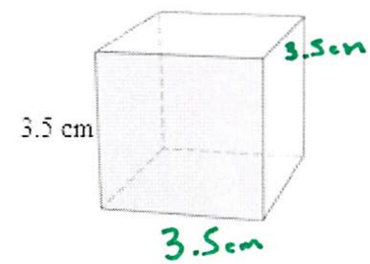
Use the following formula to help Calculate the Volume of the following *to the nearest hundredth.*

$$V = l \bullet w \bullet h$$



$V = 4 \cdot 5.5 \cdot 3.6$

$V = 79.2 \text{ cm}^3$



$V = (3.5)(3.5)(3.5)$

$V = 42.88 \text{ cm}^3$

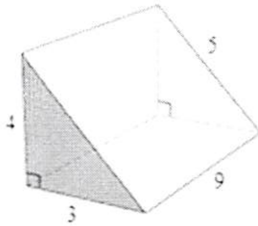
29: Volume II

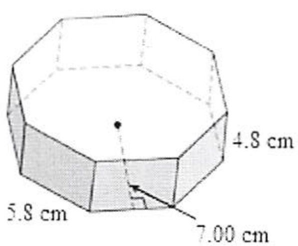
(Calculator)

Use the following formula to help Calculate the Volume of the following *to the nearest hundredth.*

$$V = B \bullet h$$

B – Area of the Base





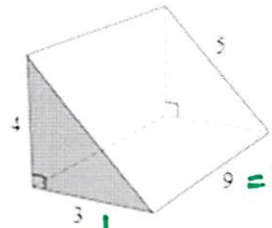
29: Volume II

(Calculator)

Use the following formula to help Calculate the Volume of the following *to the nearest hundredth.*

$$V = B \bullet h$$

B – Area of the Base



$= h$

Area of base

B

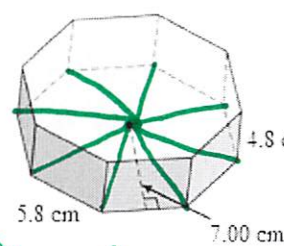
$A = \frac{b \cdot h}{2}$

$A = \frac{4 \cdot 3}{2} = 6$

$V = B \cdot h$

$V = 6 \cdot 9$

$V = 54$ units^2



B

Area of Base (Octogon)

$A = \frac{5.8 \cdot 7}{2} \times 8$ Δ's

$A = 162.4 \text{ cm}^2$

$V = B \cdot h$

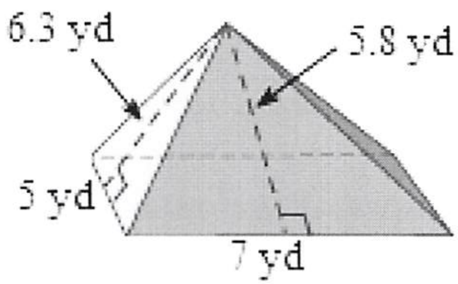
$V = 162.4 \cdot 4.8$

$\boxed{V = 779.52 \text{ cm}^3}$

30: Surface Area

(Calculator)

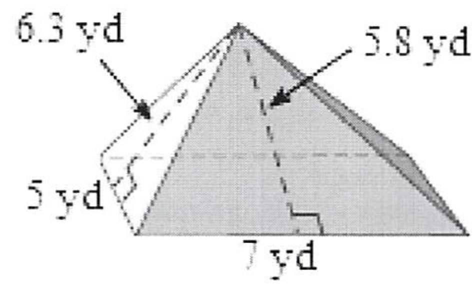
Find the Surface Area of the **Rectangular Pyramid** *to the nearest hundredth of a yard.*



30: Surface Area

(Calculator)

Find the Surface Area of the **Rectangular Pyramid** *to the nearest hundredth of a yard*



Left Face Δ = Right Face Δ

$A = \frac{b \cdot h}{2}$

$A = \frac{5 \cdot 6.3}{2} = 15.75 \times 2\Delta\text{'s} = \underline{31.5 \text{ yd}^2}$

Front Face Δ = Back Face Δ

$A = \frac{b \cdot h}{2}$

$A = \frac{7 \cdot 5.8}{2} = 20.3 \times 2\Delta\text{'s} = \underline{40.6 \text{ yd}^2}$

Base

$A = b \cdot h$

$A = 5 \cdot 7$

$A = 35 \text{ yd}^2$

Surface Area

$31.5 + 40.6 + 35$

107.1 yd^2