

Evaluating Algebraic Expressions Homework

Name _____

Evaluate using $a = 4$ and $b = 2$.

$$\boxed{1} \quad 4b$$

$$\boxed{2} \quad 5a - b^2$$

$$\boxed{3} \quad 2a^2 - 6a$$

Evaluate using $x = 8$, $y = 3$ and $z = 7$.

$$\boxed{4} \quad 3z - 6x \div (2y)$$

$$\boxed{5} \quad x^2 + y^2 - z^2$$

$$\boxed{6} \quad xy - yz + 5x$$

Evaluate using $r = 2$, $s = 6$ and $t = 4$.

$$\boxed{7} \quad 5(r^4 - 2t)$$

$$\boxed{8} \quad 7r - \left(2t - \frac{s}{2}\right)$$

Evaluate using $a = 4$ and $b = 2$.

1 $4 \cdot b$

$4 \cdot 2$

8

2 $5a - b^2$

$5 \cdot 4 - 2^2$

$5 \cdot 4 - 4$

$20 - 4$

16

3 $2a^2 - 6a$

$2 \cdot 4^2 - 6 \cdot 4$

$4 \cdot 4$

$2 \cdot 16 - 6 \cdot 4$

$32 - 24$

8

Evaluate using $x = 8$, $y = 3$ and $z = 7$.

4 $3z - 6x \div (2 \cdot y)$

$3 \cdot 7 - 6 \cdot 8 \div (2 \cdot 3)$

$3 \cdot 7 - 6 \cdot 8 \div 6$

$21 - 48 \div 6$

$21 - 8$

13

5 $x^2 + y^2 - z^2$

$8^2 + 3^2 - 7^2$

$8 \cdot 8 + 3 \cdot 3 - 7 \cdot 7$

$64 + 9 - 49$

$73 - 49$

24

6 $xy - yz + 5x$

$8 \cdot 3 - 3 \cdot 7 + 5 \cdot 8$

$24 - 21 + 40$

$3 + 40$

43

Evaluate using $r = 2$, $s = 6$ and $t = 4$.

7 $5(r^4 - 2t)$

$5 \cdot (2^4 - 2 \cdot 4)$

$2 \cdot 2 \cdot 2 \cdot 2$

$5 \cdot (16 - 2 \cdot 4)$

$5 \cdot (16 - 8)$

$5 \cdot 8$

40

8

$7r - (2t - \frac{s}{2})$

$7 \cdot 2 - (2 \cdot 4 - \frac{6}{2})$

$7 \cdot 2 - (8 - \frac{6}{2})$

$7 \cdot 2 - (8 - 3)$

$7 \cdot 2 - 5$

$14 - 5$

9