

Math Sheet

Name _____ Score _____ / 10 Teacher _____ Date _____

Evaluating One-Variable Expressions

Substitute the given value or values and evaluate exactly.

1. Evaluate: Use $b = 3$.

$$5b - 8b$$

6. Evaluate: Use $k = 2$.

$$- \frac{-18}{k} - 8k$$

2. Evaluate: Use $d = 9$.

$$-9d - 2 + 8d$$

7. Evaluate: Use $p = 40$.

$$-6p + 4 + \frac{p}{5}$$

3. Evaluate: Use $z = 4$.

$$-5z + 7 + 4z + 8$$

8. Evaluate: Use $y = 5$.

$$-8y + 3y$$

4. Evaluate: Use $g = 7$.

$$-5(-8 + 4g)$$

9. Evaluate: Use $k = 6$.

$$-8k + -3 + 9k$$

5. Evaluate: Use $z = 8$.

$$5(-5 - 9z) - 6$$

10. Evaluate: Use $p = 9$.

$$-4 + 3 + 6p + 8p$$

Evaluating One-Variable Expressions

Answer key

Substitute the given value or values and evaluate exactly.

1. **Evaluate: Use $b = 3$.**

$$5b - 8b$$

$$5b - 8b = 5 \times 3 - 8 \times 3$$

Substitute the given values.

$$5 \times 3 - 8 \times 3 = -9$$

Evaluate with exact arithmetic.

2. **Evaluate: Use $d = 9$.**

$$-9d - 2 + 8d$$

$$-9d - 2 + 8d = -9 \times 9 - 2 + 8 \times 9$$

Substitute the given values.

$$-9 \times 9 - 2 + 8 \times 9 = -11$$

Evaluate with exact arithmetic.

3. **Evaluate: Use $z = 4$.**

$$-5z + 7 + 4z + 8$$

$$-5z + 7 + 4z + 8 = -5 \times 4 + 7 + 4 \times 4 + 8$$

Substitute the given values.

$$-5 \times 4 + 7 + 4 \times 4 + 8 = 11$$

Evaluate with exact arithmetic.

4. **Evaluate: Use $g = 7$.**

$$-5(-8 + 4g)$$

$$-5(-8 + 4g) = -5(-8 + 4 \times 7)$$

Substitute the given values.

$$-5(-8 + 4 \times 7) = -100$$

Evaluate with exact arithmetic.

5. **Evaluate: Use $z = 8$.**

$$5(-5 - 9z) - 6$$

$$5(-5 - 9z) - 6 = 5(-5 - 9 \times 8) - 6$$

Substitute the given values.

$$5(-5 - 9 \times 8) - 6 = -391$$

Evaluate with exact arithmetic.

6. **Evaluate: Use $k = 2$.**

$$- \frac{-18}{k} - 8k$$

$$- \frac{-18}{k} - 8k = - \frac{-18}{2} - 8 \times 2$$

Substitute the given values.

$$- \frac{-18}{2} - 8 \times 2 = -7$$

Evaluate with exact arithmetic.

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Answer key

Substitute the given value or values and evaluate exactly.

7. **Evaluate: Use $p = 40$.**

$$-6p + 4 + \frac{p}{5}$$

$$-6p + 4 + \frac{p}{5} = -6 \times 40 + 4 + \frac{40}{5}$$

Substitute the given values.

$$-6 \times 40 + 4 + \frac{40}{5} = -228$$

Evaluate with exact arithmetic.

8. **Evaluate: Use $y = 5$.**

$$-8y + 3y$$

$$-8y + 3y = -8 \times 5 + 3 \times 5$$

Substitute the given values.

$$-8 \times 5 + 3 \times 5 = -25$$

Evaluate with exact arithmetic.

9. **Evaluate: Use $k = 6$.**

$$-8k + -3 + 9k$$

$$-8k + -3 + 9k = -8 \times 6 + -3 + 9 \times 6$$

Substitute the given values.

$$-8 \times 6 + -3 + 9 \times 6 = 3$$

Evaluate with exact arithmetic.

10. **Evaluate: Use $p = 9$.**

$$-4 + 3 + 6p + 8p$$

$$-4 + 3 + 6p + 8p = -4 + 3 + 6 \times 9 + 8 \times 9$$

Substitute the given values.

$$-4 + 3 + 6 \times 9 + 8 \times 9 = 125$$

Evaluate with exact arithmetic.