

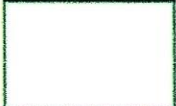





ALL PROBLEMS CAN BE COMPLETED ON THIS WORKSHEET

WS 11.2 - More Multiplying & Dividing Algebraic ExpressionsThe formula for the area of a rectangle is $A = lw$. Find the area for each rectangle.

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|---|---|--|
| <p>1. $l = 6 \text{ cm}$</p>  <p>$w = 4 \text{ cm}$</p> <p>$A = lw$ $A = (6 \text{ cm})(4 \text{ cm})$ $A = 24 \text{ cm}^2$</p> | <p>2. $l = 10 \text{ in.}$</p>  <p>$w = 3.5 \text{ in.}$</p> <p>$A = lw$ $A = (10 \text{ in.})(3.5 \text{ in.})$ $A = 35 \text{ in}^2$</p> | <p>3. $l = 3x$</p>  <p>$w = 2x$</p> <p>$A = lw$ $A = (3x)(2x)$ $A = 6x^2$</p> |
|---|---|--|

The formula for the volume of a rectangular prism is $V = lwh$. Find the volume for each rectangular prism.

| | | |
|---|---|---|
| <p>4. $l = 8 \text{ in.}$</p>  <p>$h = 3 \text{ in.}$</p> <p>$w = 4 \text{ in.}$</p> <p>$V = lwh$ $V = 96 \text{ in}^3$ $V = (8 \text{ in.})(4 \text{ in.})(3 \text{ in.})$</p> | <p>5. $l = 20 \text{ cm}$</p>  <p>$h = 8 \text{ cm}$</p> <p>$w = 7 \text{ cm}$</p> <p>$V = lwh$ $V = 1120 \text{ cm}^3$ $V = (20 \text{ cm})(7 \text{ cm})(8 \text{ cm})$</p> | <p>6. $l = 3x$</p>  <p>$h = 2y$</p> <p>$w = 3z$</p> <p>$V = lwh$ $V = 18xyz$ $V = (3x)(3z)(2y)$</p> |
|---|---|---|

7. Simplify each expression below. Circle the expressions that are equivalent.

| | | | |
|---------------------------|----------------------------------|---|-----------------------------|
| $5(3x - 7)$ $15x - 35$ | $5 \cdot (3x - 7)$ $15x - 35$ | $5(-7 + 3x)$ $-35 + 15x$ COMMUTATIVE PROPERTY SAYS $15x - 35 = -35 + 15x$ | $-5(3x + 7)$ $-15x - 35$ |
|---------------------------|----------------------------------|---|-----------------------------|

8. Simplify each expression below. Circle the expressions that are equivalent.

| | | | |
|--|---|---|------------------------------------|
| $\frac{6-12x}{6}$ $\frac{6}{6} - \frac{12x}{6}$ $1 - 2x$ | $6 - 12x \div 6$ $6 - \frac{12x}{6}$ $6 - 2x$ | $(6 - 12x) \div 6$ $\frac{6-12x}{6}$ $\frac{6}{6} - \frac{12x}{6} = 1 - 2x$ | $\frac{1}{6}(6 - 12x)$ $1 - 2x$ |
|--|---|---|------------------------------------|