

Variables (page 35)

- $3 + n = 8$ books
- $n + 200 = 1,000$ miles
- $2 + x = 7$
- $x + 12 = 48$
- $2 + x = 8$
- $1/3x = 1,000$ lb.

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Math Operations (page 7)

- $4 \times 4 = 16$
- $\$350 \div 7 = \50
- $\$30 - \$22 = \$8$
- $10 + 20 + 14 + 13 + 30 + 12 + 24 + 4 + 2 + 3 = 132$
- $50 - 25 = 25$ and $50 + 25 = 75$
- $2 \times 4 \times 6 = 48$
- $6 \times 6 = 36$
- $36 - (5 \times 7) = 1$

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Understanding Variables (page 75)

- $2 = p \times s$
- $(9)(5) = x$
- $D = 2r$
- $s = 12m$
- $s = b + 2$
- $As = L^2$
- $30/u = r$
- $H = x \div 60$
- $Ps = 4L$
- $Pr = 2(L + w)$

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Equations with Variables (page 76)

Answers may vary.

- $G = B + 2$
- $V = 5 + 6$
- $D = 10 - 5$
- $M = 100 - 2$
- $D = 1 + 2 + 3 + 4 + 5 + 6$
- $C = T/S$
- $Ps = Po - Pd$
- $T = 500 \times 1.06$
- $Tb = N \times Tp$
- $Sn = Ss(n/Ss)$

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Write It! (page 78)

Variables may differ in the formulas below.

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- The **total pay** is the product of **hours worked** and **hourly rate**. $P = H \times R$
- The **interest earned** is equal to the **principal** multiplied by the **interest rate** multiplied by the **time**. $I = PRT$
- The **distance** is equal to the product of the **rate of speed** and **time**. $D = R \times T$
- The **weight of the cat** is the difference of the **weight of the dog** and **twenty pounds**. $C = D - 20$
- The **cost** of one candy bar is equal to **one dollar** divided by **two**. $C = \$1 \div 2$
- The **y-value** is equal to the product of the **slope** and **x-value** and then added to the **y-intercept**. $Y = mx + b$
- The **square of x** is equal to **x** multiplied by **x**. $5 = x \cdot x$
- The **area of a circle** is equal to **pi** times the **radius squared**. $A = \pi r^2$
- The **length of the hypotenuse squared** equals the sum of **each side squared**. $H^2 = a^2 + b^2$
- The **number of students receiving an A** on the test was equal to **15%** of the total **number of students**. $A = 0.15 \cdot S$

Activity 73

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- $12 + x > 15$ $x > 3$
- $3(x+2) = 21$ $x = 5$
- $1200 \div 4 = x$ $x = 300$
- $33 + 8 > x$ $41 > x$
- $5x + 10 = 70$ $x = 12$
- $2x > 50$ $x > 25$
- Problems will vary. $x = 75$
- Problems will vary. $x = 10$

Activity 87

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- 50° 60° 110°
- 40° 35° 80°
- 26 in. 16 cm 17 ft.

Activity 79

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- 10° 77° -7.78° 100.4°
- 12.78° 86° -17.78° 91.4°
- 16.11° 95° -10.56° 78.8°
- 20.56° 32° 27.78° 66.2°
- 22.22° 17.6° 31.11° 53.6°
- 23.89° 28.4° -23.33° 37.4°
- 26.67° 50° 35° 23°
- 29.44° 75.2° 32.22° 14°
- 190°C is warmer. $200^\circ\text{F} = \frac{5}{9} \times (200 - 32) = \frac{5}{9} \times 168 = 93.33^\circ\text{C}$.

Activity 85

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- $a = 12$ feet $a = 9$ feet
- $b = 8$ yards $a = 24$ yards
- $c = 25$ yards $b = 4$ inches
- $c = 50$ inches $c = 25$ yards
- 12 feet

Angle Measurement (page 49)

- 60°
- 47°
- 47°
- 15°
- 45°
- 142°
- 59°
- 75°
- 48°
- 43°
- 48°
- 140°

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