

Formulas and Percent

1. Solve the formula for the indicated variable:

$$a = bcd \quad \text{for } c$$

2. Solve the formula for the indicated variable:

$$a = bx - c + d \quad \text{for } b$$

3. Solve the formula for the indicated variable:

$$A = \frac{BCE}{D} \quad \text{for } D$$

4. Solve the formula for the indicated variable:

$$A - AB = D - E \quad \text{for } A$$

5. Solve the formula for the indicated variable:

$$D = \frac{1}{3} C (A + B) \quad \text{for } B$$

6. Solve for y:

$$2x - 3y = 6$$

7. Solve for y:

$$\frac{5}{4}x - \frac{1}{3}y = -2$$

8. The surface area S of a rectangular prism is given by the formula:

$$S = 2ab + 2bc + 2ac$$

where a , b , and c are the lengths of the sides.

- a) Solve the formula for a
- b) Determine a where the surface area is 158

square centimeters and whose side b is 5 centimeters and side c is 8 centimeters

9. The model $M = 3A + 100$ was developed by Hays to model nothing

- a) Solve the model for A
- b) According to this model, what is A when M is 400?