

Name : \_\_\_\_\_

## Rearranging Equations

Sheet 1

1) Solve  $y = mx + c$  for  $m$ .

2) Solve  $E = mc^2$  for  $c$ .

3) Solve  $P = 2(l + w)$  for  $l$ .

4) Solve  $A = \frac{1}{2}bh$  for  $h$ .

5) Solve  $m = \rho V$  for  $V$ .

6) Solve  $\frac{x^2}{a^2} - \frac{y^2}{b^2} = 1$  for  $a$ .

7) Solve  $I = \frac{P}{V}$  for  $P$ .

8) Solve  $V = \frac{1}{3}\pi r^2 h$  for  $h$ .

9) Solve  $ax + by = c$  for  $b$ .

10) Solve  $s = ut - \frac{1}{2}at^2$  for  $u$ .

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## Answer key

Sheet 1

### Rearranging Equations

1) Solve  $y = mx + c$  for  $m$ .

$$m = \frac{y - c}{x}$$

2) Solve  $E = mc^2$  for  $c$ .

$$c = \sqrt{\frac{E}{m}}$$

3) Solve  $P = 2(l + w)$  for  $l$ .

$$l = \frac{P}{2} - w$$

4) Solve  $A = \frac{1}{2}bh$  for  $h$ .

$$h = \frac{2A}{b}$$

5) Solve  $m = \rho V$  for  $V$ .

$$V = \frac{m}{\rho}$$

6) Solve  $\frac{x^2}{a^2} - \frac{y^2}{b^2} = 1$  for  $a$ .

$$a = \pm \sqrt{\frac{b^2 x^2}{b^2 + y^2}}$$

7) Solve  $I = \frac{P}{V}$  for  $P$ .

$$P = VI$$

8) Solve  $V = \frac{1}{3}\pi r^2 h$  for  $h$ .

$$h = \frac{3V}{\pi r^2}$$

9) Solve  $ax + by = c$  for  $b$ .

$$b = \frac{c - ax}{y}$$

10) Solve  $s = ut - \frac{1}{2}at^2$  for  $u$ .

$$u = \frac{2s + at^2}{2t}$$