Literal Equations

Solve each equation for the given variable.

1. $c = \dfrac{d}{2}$, for d

2. $-3x + 2c = -3$, for x

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3. $12ax = 3$, for a

4. $7a - 8b = 10x$, for a

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5. $2b - 9 = d$, for b

6. $\dfrac{1}{2}(4x) = 10$, for x

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7. $v = \pi r^2 h$, for h

8. $y = mx + b$, for b

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9. $ax + by = c$, for y

10. $ax = y + p$, for a

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Literal Equations

Answers

1 $c = \dfrac{d}{2}$, for d

$d = 2c$

2 $-3x + 2c = -3$, for x

$x = \dfrac{2c + 3}{3}$

3 $12ax = 3$, for a

$a = \dfrac{3}{12x}$

4 $7a - 8b = 10x$, for a

$a = \dfrac{10x + 8b}{7}$

5 $2b - 9 = d$, for b

$b = \dfrac{d + 9}{2}$

6 $\dfrac{1}{2}(4x) = 10$, for x

$x = 5$

7 $v = \pi r^2 h$, for h

$h = \dfrac{v}{\pi r^2}$

8 $y = mx + b$, for b

$b = y - mx$

9 $ax + by = c$, for y

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

10 $ax = y + p$, for a

$a = \dfrac{y + p}{x}$