

## Answers Sheet

### Changing the Subject of the Formula

1.

$$p = 4c - 6$$

$$p + 6 = 4c$$

$$c = \frac{p + 6}{4}$$

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2.

$$d = 3e - 28$$

$$d + 28 = 3e$$

$$e = \frac{d + 28}{3}$$

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3.

$$f = 7w - 2$$

$$f + 2 = 7w$$

$$w = \frac{f + 2}{7}$$

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4.

$$a = 2q + 5g$$

$$a - 2q = 5g$$

$$g = \frac{a - 2q}{5}$$

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5.

$$j = 3e - 2$$

$$j + 2 = 3e$$

$$e = \frac{j + 2}{3}$$

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6.

$$V = 4r + 4s$$

$$V - 4s = 4r$$

$$r = \frac{V - 4s}{4}$$

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7.

$$\begin{aligned}t &= i^2 + 2 \\t - 2 &= i^2 \\i &= \pm\sqrt{t-2}\end{aligned}$$

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8.

$$\begin{aligned}l &= m + ft \\l - m &= ft \\f &= l - m / t\end{aligned}$$

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9.

$$\begin{aligned}x^2 &= y^2 + 6gh \\x^2 - y^2 &= 6gh \\6h &= x^2 - y^2 / g\end{aligned}$$

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10.

$$\begin{aligned}b &= \sqrt{\frac{a+2}{5}} \\b^2 &= \left(\sqrt{\frac{a+2}{5}}\right)^2 \\b &= a + 2 / 5 \\5b &= a + 2 \\a &= 5b - 2\end{aligned}$$

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11.

$$\begin{aligned}A &= 5b + 10 \\A - 10 &= 5b \\b &= A - 10 / 5\end{aligned}$$

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12.

$$\begin{aligned}x &= 6y - 9 \\x + 9 &= 6y \\y &= x + 9 / 6\end{aligned}$$

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13.

$$s = \frac{1}{2}k + 8$$

$$s - 8 = \frac{1}{2}k$$

$$k = 2(s - 8)$$

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14.

$$o = \frac{3}{5}h - 15$$

$$o + 15 = \frac{3}{5}h$$

$$5(o + 15) = 3h$$

$$h = 5(o + 15) / 3$$

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15.

$$3g + 5b + 16 = 0$$

$$3g + 16 = -5b$$

$$3g = -5b - 16$$

$$g = -5b - 16 / 3$$

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16.

$$x = y^3 - 4$$

$$x + 4 = y^3$$

$$y^3 = x + 4$$

$$y = \sqrt[3]{x+4}$$

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17.

$$z = \frac{4d+2}{5}$$

$$5z = 4d + 2$$

$$5z - 2 = 4d$$

$$d = 5z - 2 / 4$$

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**18.**

$$x = 4(a + 7)$$

$$x = 4a + 28$$

$$x - 28 = 4a$$

$$a = x - 28 / 4$$

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**19.**

$$N = 7 + b / f$$

$$Nf = 7 + b$$

$$b = Nf - 7$$

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**20.**

$$Y = \sqrt{\frac{3j}{5}}$$

$$Y^2 = \left(\sqrt{\frac{3j}{5}}\right)^2$$

$$Y^2 = 3j / 5$$

$$5Y^2 = 3j$$

$$j = 5Y^2 / 3$$

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