Two-Step Equations (solve each using inverse operations) Work Vertically!!!

Answers

$5n + 5 = 45$

$-5 \quad -5$

$\frac{5n}{5} = \frac{40}{5}$

$n = 8$

$\frac{y}{6} - 3 = 4$

$+3 \quad +3$

$6\left(\frac{y}{6}\right) = (7)6$

$y = 42$

$\frac{4(g-1)}{4} = \frac{24}{4}$

$g - 1 = 6$

$+1 \quad +1$

$g = 7$

$4(g - 1) = 24$

or

$4g - 4 = 24$

$+4 \quad +4$

$\frac{4g}{4} = \frac{28}{4}$

$g = 7$

$15\left(\frac{y+9}{15}\right) = (0)15$

$y + 9 = 0$

$-9 \quad -9$

$y = -9$

$30 = 12x - 6$

$+6 \quad +6$

$\frac{36}{12} = \frac{12x}{12}$

$3 = x$ or $x = 3$

$2p + 3 = 19$

$-3 \quad -3$

$\frac{2p}{2} = \frac{16}{2}$

$p = 8$

$2(13) = \left(\frac{w-14}{2}\right)2$

$26 = w - 14$

$+14 \quad +14$

$40 = w$ or $w = 40$

$36 = 1 + 7a$

$-1 \quad -1$

$\frac{35}{7} = \frac{7a}{7}$

$5 = a$

$-9 = -11 + \frac{b}{8}$

$+11 \quad +11$

$8(2) = \left(\frac{b}{8}\right)8$

$16 = b$ or $b = 16$

$\frac{2}{3}q - 1 = \frac{3}{4}$

$+1 \quad +1$ or $\frac{4}{4}$

$\frac{3}{2}\left(\frac{2}{3}q\right) = \left(\frac{7}{4}\right)\frac{3}{2}$

$q = \frac{21}{8}$ or $2\frac{5}{8}$

Name: Answers Score: _____

Solving & Graphing Inequalities

ES1

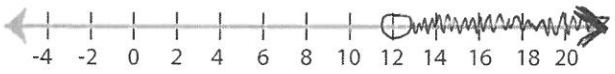
Solve each inequality and graph the solution.

1) $\frac{x}{2} + 3 > 9$

$-3 \quad -3$

$2\left(\frac{x}{2}\right) > (6)2$

$\boxed{x > 12}$

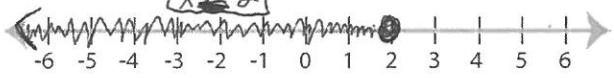


2) $4x + 5 \leq 13$

$-5 \quad -5$

$\frac{4x}{4} \leq \frac{8}{4}$

$\boxed{x \leq 2}$

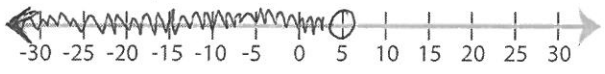


3) $7x - 19 < 16$

$+19 \quad +19$

$\frac{7x}{7} < \frac{35}{7}$

$\boxed{x < 5}$

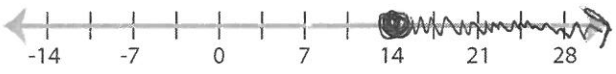


4) $5\left(\frac{x-4}{5}\right) \geq (2)5$

$x - 4 \geq 10$

$+4 \quad +4$

$\boxed{x \geq 14}$

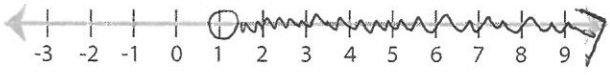


5) $9 + 3x > 12$

$-9 \quad -9$

$\frac{3x}{3} > \frac{3}{3}$

$\boxed{x > 1}$



6) $3x - 4 \leq 5$

$+4 \quad +4$

$\frac{3x}{3} \leq \frac{9}{3}$

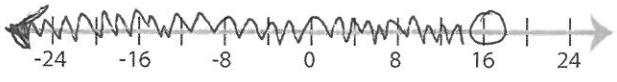
$\boxed{x \leq 3}$

7) $\frac{x}{8} + 1 < 3$

$-1 \quad -1$

$8\left(\frac{x}{8}\right) < (2)8$

$\boxed{x < 16}$



8) $2x + 5 \geq 19$

$-5 \quad -5$

$\frac{2x}{2} \geq \frac{14}{2}$

$\boxed{x \geq 7}$

Name : Answers Score : _____

Translating Phrases

ES1

Translate each verbal phrase into an algebraic expression :

1)	Twice the sum of x and 3 is less than 5	$2(x+3) < 5$
2)	4 times x plus 2 is atmost 10	$4x + 2 \leq 10$
3)	Fifteen more than three times a number is atmost 7	$3x + 15 \leq 7$
4)	The sum of two times x and one is atleast 11	$2x + 1 \geq 11$
5)	Eight less than five times a number is greater than 6	$5x - 8 > 6$
6)	Thrice the difference between x and 4 is less than 9	$3(x-4) < 9$
7)	Eleven less than 7 times a number is atleast 2	$7x - 11 \geq 2$
8)	Twice the sum of 13 and x is not greater than 15	$2(13+x) \leq 15$
9)	Fourteen less than five times a number is atmost 10	$5x - 14 \leq 10$
10)	Thrice the sum of x and 12 is greater than or equal to 8	$3(x+12) \geq 8$