Key

Why Was the Pail Pale?

Solve each equation or problem and find your answer at the bottom of the page. Write the letter of the exercise in the box containing its solution.

E $5x + 2x - 9 = 40$

$7x - 9 = 40$
$+9 \quad +9$
$\frac{7x}{7} = \frac{49}{7}$
$x = 7$

T $1y - 4y + 3 = -30$

$-3y + 3 = -30$
$-3 \quad -3$
$\frac{-3y}{-3} = \frac{-33}{-3}$
$y = 11$

C $6t + 2 + 3t + 17 = 10$

$9t + 19 = 10$
$-19 \quad -19$
$\frac{9t}{9} = \frac{-9}{9}$
$t = -1$

A $3a - 7a + 12 = 32$

$-4a + 12 = 32$
$-12 \quad -12$
$\frac{-4a}{-4} = \frac{20}{-4}$
$a = -5$

L $-5u + 4 + 8u = 43$

$3u + 4 = 43$
$\frac{3u}{3} = \frac{39}{3}$
$u = 13$

N $-4k - 6 - 7k + 20 = -2$

$-8k + 14 = -2$
$-8k = -16$
$k = 2$

U $\frac{5}{3}x - \frac{4}{3}x - 1 = 8$

$\frac{1}{3}x - 1 = 8$
$\frac{1}{3}x = 9$
$x = 27$

I $-\frac{3}{5}b + 7 + \frac{2}{5}b = 19$

$-\frac{1}{5}b + 7 = 19$
$-7 \quad -7$
$-\frac{5}{1} \cdot -\frac{1}{5}b = \frac{12}{1} \cdot -\frac{5}{1}$
$b = -60$

T $16 - 2n - 5 + 8n = 65$

$6n + 11 = 65$
-11
$\frac{6n}{6} = \frac{54}{6}$
$n = \frac{54}{6} = 9$
$n = 9$

E $4p - 13p - p = -150$

$\frac{-10p}{-10} = \frac{-150}{-10}$
$p = 15$

A $35 + \frac{5}{2}y - \frac{1}{2}y = 3$

$2y + 35 = 3$
$-35 \quad -35$
$\frac{2y}{2} = \frac{-32}{2}$
$y = -16$

W $\frac{1}{8}d - 4 + \frac{3}{8}d - 4 = 5$

$\frac{1}{2}d - 8 = 5$
$\frac{2}{1} \cdot \frac{1}{2}d = \frac{13}{1} \cdot \frac{2}{1}$
$d = 26$

T $\frac{5}{7}m - 2 - \frac{6}{7}m = -13$

$-\frac{1}{7}m - 2 = -13$
$+2 \quad +2$
$-\frac{1}{7}m = \frac{-11}{1} \cdot \frac{-7}{1}$
$m = 77$

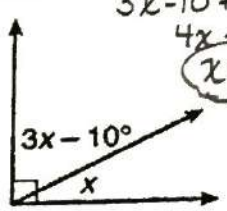
L $\frac{10}{10}v - \frac{9}{10}v + 6 = \frac{11}{-6}$

$\frac{10}{1} \cdot \frac{1}{10}v = \frac{5}{1} \cdot \frac{10}{1}$
$v = 50$

S $70 - q - q - 2q = 80$

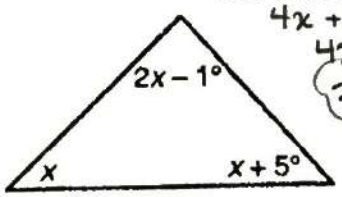
$-4q + 70 = 80$
$-4q = 10$
$q = \frac{10}{-4} = -\frac{5}{2} = -2.5$
$q = -2.5$

B The sum of the measures of two complimentary angles is 90°. Find the measure of the angle labeled x.



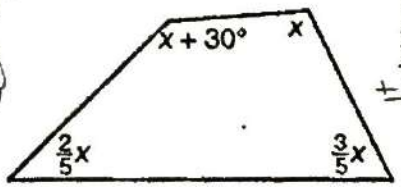
$3x - 10 + x = 90$
$4x = 100$
$x = 25$

K The sum of the measures of the three angles of a triangle is 180°. Find the measure of the angle labeled x.



$2x - 1 + x + x + 5 = 180$
$4x + 4 = 180$
$4x = 176$
$x = 44°$

W The sum of the measures of the four angles of a quadrilateral is 360°. Find the measure of the angle labeled x.



$x + 30$
x
$\frac{2}{5}x$
$+\frac{3}{5}x$
$3x + 30 = 3$
$3x = 33$
$x = 11$

-60	11	-8	26	-5	-2.5	2	9	36°	-16	31	110°	7	50	13	95°	25°	27	-1	44°	15	77
I	T		W	A	S	N	T		A		W	E	L	L		B	u	C	K	E	T

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