Warm Up Grade 7

April 25, 2023

Solve(Show work)

1) $\underline{v} + 11 = 17$
   4

$$\frac{v}{4} + 11^{-11} = 17 - 11$$

$$\frac{v}{4} = 6$$

$$4 \cdot \frac{v}{4} = 6 \cdot 4$$

$$\boxed{v = 24}$$

2) $3x - 4 = 29$

(0.5)   (0.5)

$$3x - 4 + 4 = 29 + 4$$

$$3x = 33 \,(0.5)$$

$$\frac{3x}{3} = \frac{33}{3} \quad ①$$

$$\boxed{x = 11} \quad (0.5)$$

3) What is $m + m + m + m + m$ simplified to?

$5m$

Extra Practice 4

🙂 3a) $x =$ number of hours

$$7x + 5 = 40$$

$$7x + 5 - 5 = 40 - 5$$

$$7x = 35$$

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

$$x = 5$$

She baby-sat 5 hours.

LS   RJ
7x+5   40
7(5)+5
35+5
40

b) $h =$ hours worked

$$8h + 9 = 65$$

$$8h + 9 - 9 = 65 - 9$$

$$8h = 56$$

$$\frac{8h}{8} = \frac{56}{8}$$

$$h = 7$$

He worked 7 hours

LS   RS
8h+9
8×7+9
56+9   65
65

c) $h =$ hours worked

$$6h + 12 = 90$$

$$6h + 12 - 12 = 90 - 12$$

$$6h = 78$$

$$\frac{6h}{6} = \frac{78}{6}$$

$$h = 13$$

She worked 13 hours

LS   RS
6h+12   90
6×13+12
78+12
90

Homework Sheet Extra Practice 4 # 4,5
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4. x = number of week

$18x + 84 = 210$

$18x + 84 - 84 = 210 - 84$

$18x = 126$

$\dfrac{18x}{18} = \dfrac{126}{18}$

$x = 7$

It will take
7 weeks

LS
$18x + 84$
$18 \times 7 + 84$
$126 + 84$
210

RS
210

b) w = number of weeks

$23w + 172 = 264$

$23w + 172 - 172 = 264 - 172$

$23w = 92$

$\dfrac{23w}{23} = \dfrac{92}{23}$

$w = 4$

It will
take 4 weeks.

LS
$23w + 172$
$23 \times 4 + 172$
$92 + 172$
264

RS
264

5a) $x =$ number of hours

$$6x + 12 = 30$$

$$6x + 12 - 12 = 30 - 12$$

$$6x = 18$$

$$\frac{6x}{6} = \frac{18}{6}$$

$$x = 3$$

He can play
for 3 hours.

LS
6x+12
6×3+12
18+12
30

RS
30

b) $x =$ number of hours

$$12x + 15 = 75$$

$$12x + 15 - 15 = 75 - 15$$

$$12x = 60$$

$$\frac{12x}{12} = \frac{60}{12}$$

$$x = 5$$

He can fish
for 5 hours.

LS
12x+15
12×5+15
60+15
75

RS
75

c) $h =$ number of hours

$$3h + 8 = 20$$

$$3h + 8 - 8 = 20 - 8$$

$$3h = 12$$

$$\frac{3h}{3} = \frac{12}{3}$$

$$h = 4$$

You can skate
for 4 hours.

LS
3h+8
3×4+8
12+8
20

RS
20

pg 245

1 a) $\frac{x}{2} = 4$

$\frac{x}{2} \times 2 = 4 \times 2$

$x = 8$

b) $\frac{x}{3} = 7$

$\frac{x}{3} \times 3 = 7 \times 3$

$x = 21$

c) $\frac{x}{4} = 16$

$\frac{x}{4} \times 4 = 16 \times 4$

$x = 64$

d) $\frac{x}{5} = 10$

$\frac{x}{5} \times 5 = 10 \times 5$

$x = 50$

2 a) $x + 5 = 12$

$x + 5 - 5 = 12 - 5$

$x = 7$

b) $x - 5 = 12$

$x - 5 + 5 = 12 + 5$

$x = 17$

c) $\frac{x}{6} = 9$

$\frac{x}{6} \times 6 = 9 \times 6$

$x = 54$

d) $x + 4 = -9$

$x + 4 - 4 = -9 - 4$

$x = -13$

e) $4x = 36$

$\frac{4x}{4} = \frac{36}{4}$

$x = 9$

f) $16x = 112$

$\frac{16x}{16} = \frac{112}{16}$

$x = 7$

g) $4x + 2 = 30$

$4x + 2 - 2 = 30 - 2$

$4x = 28$

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

$x = 7$

h) $8x + 17 = 105$

$8x + 17 - 17 = 105 - 17$

$8x = 88$

$\frac{8x}{8} = \frac{88}{8}$

$x = 11$

5

3. b = # of beads Mary had

$$b + 7 = 21$$
$$b + 7 - 7 = 21 - 7$$
$$b = 14$$

LS	RS
$b+7$	21
$14+7$	
21	

Mary had 14 beads.

4. b = # of cookies Jerome

$$\frac{b}{8} = 4$$
$$\frac{b}{8} \times 8 = 4 \times 8$$
$$b = 32$$

LS	RS
$\frac{b}{8}$	4
$\frac{32}{8}$	
4	

5. Discuss

6. m = number of months

$$8m + 20 = 92$$
$$8m + 20 - 20 = 92 - 20$$
$$8m = 72$$
$$\frac{8m}{8} = \frac{72}{8}$$
$$m = 9$$

LS	RS
$8m + 20$	92
$8 \times 9 + 20$	
$72 + 20$	
92	

In 9 months
She will have
92 songs

Class / Homework

Sheet Extra Practice 5 # 1-7

5)a) $8g + 6 = 38$

5b) $5g + 3 = 38$

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6) $5kg \rightarrow \$8$

$10 kg \rightarrow \$14$

6 bags of 5kg

$6 \times 8 = 48$

$X = \#$ of 10kg bags Rose buys

$14x + 48 = 202$

Test- Thursday

Test Outline

7 MC

6 Long response

#1 (a to f solve using algebra)

#2 (Word Problem - Write equation and solve)

#3 (Word Problem - Write equation, solve & Verify)

#4 (Area and perimeter question with formulas given just have to fill in given information and solve)

Attachments

Extra Practice 5 Solving Equations by using different models to solve pdf.pdf