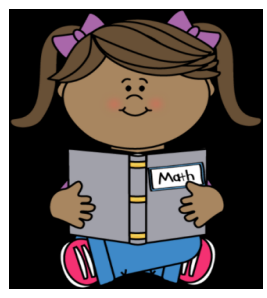


Warm Up Gr 8

Date: Oct 28



1. Fill in the chart

Percent	Decimals	Fractions
24%	0.24	$\frac{24}{100} = \frac{12}{50} = \frac{6}{25}$
8%	0.08	$\frac{8}{100} = \frac{4}{50} = \frac{2}{25}$
62.5%	0.625	$\frac{5}{8}$ $\frac{\times 125}{\times 125} = \frac{625}{1000}$
1.7%	0.017	$\frac{1.7}{100} \frac{\times 10}{\div 10} \frac{17}{1000}$

$\frac{17}{1000}$

2) Without a calculator

a) Find 75% of 168

25% of 168 = 42

$\times 3$ $\times 3$

75% of 168 = 126

75% = 126

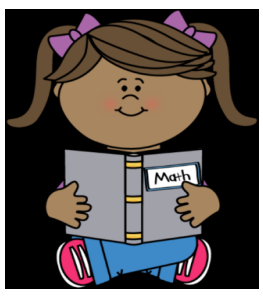
b) 15% of 62

10% of 62 = 6.2

$\div 2$ $\times 3$

5% of 62 = 31

15% of 62 = 9.3



Warm Up Gr 8

Date: _____



1. **Fill in the chart**

Percent	Decimals	Fractions
24% ÷100→	0.24	$\frac{24}{100} = \frac{12}{50} = \frac{6}{25}$
8% ←×100	0.08	$\frac{8}{100} = \frac{4}{50} = \frac{2}{25}$
62.5% ←×100	0.625	$\frac{5}{8}$ ←5÷8
1.7%	0.017	$\frac{17}{1000}$

2) Without a calculator

a) Find 75% of 168

25% of 168 = 42 (×3)

(×3) 75% of 168 = 126

b) 15% of 62

10% of 62 = 6.2 (÷2 → 5%, ÷2)

+ 5% of 62 = +3.1

15% of 62 = 9.3

WS 247 solutions

4 a) 40% of 19.95

0.4×19.95

7.98

b) Sale Price $= 19.95 - 7.98$

$= 11.97$

c) 60% of 19.95

0.6×19.95

11.97

6. a) Disc 25% of 500

0.25×500

125

Sale Price = Reg - Disc

500 − 125

$375

b) Disc 20% of 450

0.2×450

90

Sale Price 450 − 90

360

7., 8.

Regular Price	Sale Price	Discount	Fraction	Decimal	Percent
(a) 25 ¢	¢	25 − 17 = 8¢	$\frac{8}{25} = \frac{32}{100}$	0.32	32%
(b) ~~$2.00~~	~~$1.50~~				
(c) $25.00	$19.50	$2 - 1.50 = 0.50	$\frac{0.5}{5} = \frac{1}{4}$	0.25	25%
(d) $400	$360	25 − 19.50 = 5.50	$\frac{5.5}{25} = \frac{22}{100}$	0.22	22%
		400 − 360 = 40	$\frac{40}{400} = \frac{10}{100}$	0.1	10%

B.y - Small

Diff / orig

Page 115

1a) 10% of 30 = 3

same as ÷ by 10

30 ÷ 10 = 3

1b) 20% of 50 = 10

10% of 50 = 5

x2 x2

20% of 50 = 10

1c) 18% of 36 = 6.48

10% of 36 = 3.6

1% of 36 = 0.36

x8 x8

8% of 36 = 2.88

18% = 10% + 8%

18% of 36 = 3.6 + 2.88

= 6.48

0.18 x 36 = 6.48

1d) 67% of 112 = 75.04

10% of 112 = 11.2

x6

60% of 112 = 67.2

1% of 112 = 1.12

x7 x7

7% of 112 = 7.84

0.67 x 112 = 75.04

x6

67% of 112 = (60% of 112)+(7% of 112)

= 67.2 + 7.84

= $ 75.04

2. The regular price of a radio is $60.00.
Find the sale price before taxes when the radio is on sale for:
a) 25% off **b)** 30% off **c)** 40% off



a) Discount $ = % x Price

= 25% x $60

= 0.25 x $60

= $15

Sales Price= Price - Discount $

= $60 - $15

= $45

b) Discount $ = % x Price

= 30% x $60

= 0.30 x $60

= $18

Sales Price= Price - Discount $

= $60 - $18

= $42

c) Discount $ = % x Price

= 40% x $60

= 0.40 x $60

= $24

Sales Price= Price - Discount $

= $60 - $24

= $36

3. Find the sale price before taxes of each item.

a) coat: 55% off $90

a) Discount $ = % x Price

= 55% x $90

= 0.55 x $90

= $ 49.50

Sales Price= Price - Discount $

= $90 - $49.50

= $40.50

b) shoes: 45% off $40

b) Discount $ = % x Price

= 45% x $40

= 0.45 x $40

= $ 18

Sales Price= Price - Discount $

= $40 - $18

= $22

c) sweater: 30% off $50

c) Discount $ = % x Price

= 30% x $50

= 0.30 x $50

= $ 15

Sales Price= Price - Discount $

= $50 - $15

= $35

4. Find the tip left by each customer at a restaurant.

a) Denis: 15% of $24.20

Tip$ = % x Price

= 15% x $24.20

= 0.15 x $24.20

= $ 3.63

b) Molly: 20% of $56.50

Tip$ = % x Price

= 20% x $56.50

= 0.20 x $56.50

= $ 11.30

c) Tudor: 10% of $32.70

Tip$ = % x Price

= 10% x $32.70

= 0.10 x $32.70

= $ 3.27

5) ii) Find the cost of the item including TAX

a) bicycle: $129.00

Tax $ = % x Price

= 15% x $129.00

= 0.15 x $129.00

= $ 19.35

Cost with Tax = Price + Tax $

= $129 + $19.35

= $148.35

b) DVD: $24.99

Tax $ = % x Price

= 15% x $24.99

= 0.15 x $24.99

= $ 3.75

Cost with Tax = Price + Tax $

= $24.99 + $3.75

= $28.74

c) skateboard: $42.97

Tax $ = % x Price

= 15% x $42.97

= 0.15 x $42.97

= $ 6.45

Cost with Tax = Price + Tax $

= $42.97 + $6.45

= $49.42

Calculate the percent difference of a pair of sneakers that were originally $170 and goes on sale for $86.25.

Difference = Big − Small

= 170 − 86.25

= 83.75

$$\%\,\text{Diff} = \frac{\text{Diff}}{\text{orig}} \times 100\,\%$$

$$\frac{83.75}{170} \times 100$$

$$= 0.49 \times 100$$

$$= 49\%$$



Most sports drinks contain minerals. Research shows that the most effective sports drink has a magnesium to calcium ratio of 1:2.



The body absorbs about 87% of magnesium in a drink, and about 44% of calcium in a drink.

One serving of a particular sports drink contains about 96 mg of calcium and 48 mg of magnesium.

About how many milligrams of each mineral will the body absorb?

About means you can round /estimate

87% of Mag
= 0.87 x 48mg
= 41.76 mg

44% of Cal
= 0.44 x 96mg
= 42.24 mg

Worksheet 152

1. Calculate. (use strategies 1%, 10%, 25%, 50%,..)

a) 40% 550 **b)** 50% 486 **c)** 75% 400 **d)** 15% 360

2. The regular price of a garbage can is $114

Find the sale price before taxes when the [redacted] is on sale for:

a) 25% off **b)** 30% off **c)** 40% off

3. Find the sale price before taxes of each item.

a) Phone: 20% off $1520 **b)** Steak: 75% off $36

4) Find the cost with tax

a) Stapler: $43.34

b) Picture: $91.30

c) car: $51 478

5) Find the Discount amount (Amount saved for the following:

a) Regular Price = $56.00

35% off

b) Regular Price = $84.20

12.5% off

6) Fill in the missing values of following chart:

remember to reduce fractions to lowest terms

Fraction	Decimal	Percent
$\frac{14}{27}$		
	0.0015	
		47%
	0.9	
		21.3%

7) Mentally calculate using 1%, 5%, 10%, 25%, 50%, 100% strategies.

a) 10 % 723

b) 5% of 140

c) 75% of 40

d) 15% of 280

e) 30 % of 74