

Warm Up Grade 8



1. A jacket that regularly sells for $84.50 is discounted by 30%. What is the sale price?

$ Saved = 30% of Price

= 0.30 × $84.50

= $25.35

Sales Price = Price − $ Saved

= 84.50 − $25.35

= $59.15



Warm Up Grade 8



1. A jacket that regularly sells for $84.50 is discounted by 30%. What is the sale price?

Saved $
Discount = % x Price
= 30% x $84.50
= 0.30 x 84.50
= $25.35

Sales Price = Price − Saved $ Discount
= $84.50 − $25.35
= $59.15

Sheet 247

1. Disc 30% of 29.99

0.3×29.99

9

Sale Pr $= 29.99 - 9$

$= 20.99$

Estimate

$\approx$ 30% of 30

$= 9$

Sale Price

$30 - 9 = \$21$

2. a) 40% of 9.98

0.4×9.98

3.99

$\approx$ 40% of 10

4

b) 96% of 5

0.96×5

4.80

$\approx$ 100% of 5 $= 5$

96% of 5 $= 4.80$

c) 10% of 17.60

0.01×17.60

0.176 or 0.18

or 18¢

d) 10% of 19.95

0.1×19.95

$= 1.995$

$= 2$

$\approx$ 10% of 20

2

e) 5% of 3.25

0.05×3.25

0.1625

$= 0.16$

$\approx$ 5% of 3.00

10% of 3 $= 0.30$

5% of 3 $= 0.15$

f) 20% of 87.49

0.2×87.49

17.50

$\approx$ 20% of 90

18

g) 29% of 1500

0.29×1500

435

$\approx$ 30% of 1500

10% of 1500 $= 150$

30% of 1500 $= 450$

h) 33.3% of 15

0.333×15

4.995

$= 5$

$\approx \frac{1}{3}$ of 15 $= 5$

3. 50% of 7.99

$\approx$ 50% of 8 = 4

6 T-shirts $\rightarrow$ 6 x 4

= \$24

5. a) Saved 7.98 - 5.98

\$2

b) She saved $\approx$ 2 out of 8 dollars

$\frac{2}{8} = \frac{1}{4} = 0.25$ 25%

To find Discount as a %

$$\%\ \text{difference} = \frac{\text{Difference}}{\text{Original Price}} \times 100$$

Step 1)

Diffence = Regular price - Sales Price

Difference = Big - small

Step 2) Write discount as a fraction of whole price

$$\frac{\text{Difference}}{\text{Original Price}}$$

Step 3) Now use the fraction to write a decimal and a percent $\frac{\text{Difference}}{\text{Original Price}} \times 100$

Ex1) The regular price of a coffee maker was $28 and the sales price is $19.60. What is the discount as a %?



Diff = Big - Small

= $28 - $19.60

= $8.40

$$\%\ \text{Diff} = \frac{\text{Diff}}{\text{original}} \times 100$$

$$= \frac{8.40}{28} \times 100$$

0.3 x 100

= 30 %

Regular price $0.25

Sales Price $0.17

Find the % discounted?

Diff = Big - Small

= 0.25 - 0.17

= 0.08

$$\%\,Diff = \frac{Diff}{Orig} \times 100$$

$$= \frac{0.08}{0.25} \times 100$$

$$= 0.32 \times 100$$

32%

Reg	Sale	Diff Big - Small	Fract	Dec	%
0.25	0.17	0.08	$\frac{0.08}{0.25} \div \frac{8}{25} = \frac{32}{100}$	0.32	32%

Test Tw days time

Friday

Test Outline

Study Rule

5 Multiple Choice

5 Short Response

1) Chart - Change Percents/Decimals/Fractions

2) Mentally explain 10%, 20%..., 25%, 50%, 15%

3) Discount & Sales price

4) 15% Hst and Total Price

5) Mentally calculte the following(show what method you used fo
calculations. Must use 1%, 10%, 25%, 50% strategies taught in

Chart #6

Frac
Diff
Dec

17% of 200
*10% of 200 = 20
1% of 200 = 2
x7
x7
x 7% of 200 = 14
17% of 200 = 34

Homework Sheet 247 # 4-6

Save for tomorrow

WS 115 #1(use strategies 1%, 10%, 25%, 50%,..)

2

#3

#4

#5

Tax

Tax $ = 15% x Price

= -0.15 x ____

= $ ____

Cost w/ Tax = Tax $ + Price

= $ ____ + ____

Discount

$ Saved = Rate % x Price

÷100 ↓ Change to decimal

= ____ x Price

Sales Price = Price − $ Saved

% Diff = $\frac{\text{Difference}}{\text{Original}} \times 100$

Diff = Big − Small

Ex) Reg = $7.25

Sale = 5.00

$= \frac{7.25 - 5.00}{7.25} \times 100$

$= \frac{2.25}{7.25} \times 100$

$= 0.31 \times 100$

$= 31\%$

6a) Reg 0.25

Sale 0.17

Discount
Big-Sm
0.25 - 0.17
0.08

$\frac{0.08}{0.25} \times 100$
$= 0.32 \times 100$
32%.

Fruit 32/100 $= \frac{16}{50} = \frac{8}{25}$

Dec 0.32

% 32

b) 2

1.50

Discount
$\frac{2 - 1.50}{2} \times 100$
$\frac{0.5}{2} \times 100$
0.25×100
25%.

$\frac{25}{100} = \frac{1}{4}$ 0.25 25%

WS 115

1. Calculate.

a) 10% of 30 **b)** 20% of 50 **c)** 18% of 36 **d)** 67% of 112

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



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

a) coat: 55% off $90 b) shoes: 45% off $40 c) sweater: 30% off $50

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

a) Denis: 15% of $24.20 b) Molly: 20% of $56.50 c) Tudor: 10% of $32.70

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

a) bicycle: $129.00 b) DVD: $24.99 c) skateboard: $42.97

put over 100

or

Top ÷ Bott

Fract → Dec → % (X 100)

Fract ← Dec ← % (÷100)

place values

% Mentally

Ex) 10% of 85 = 8.5

10% of # is like ÷ by 10

10% → can be use to get 20%, 30%, 40%, 50%, 60%, ... by using multiply

Ex) 70% of 140 =>

↓ start with 10%

10% of 140 = 14 (x7)

x7

70% of 140 = 98

Use 10% to get 5% of a number

Ex) 5% of 126

start with 10% of 126 = 12.6

↓ To get 5% ÷2 ↓ ÷2

5% of 126 = 6.3

25% of a number is like divide # by 4

Ex) 25% of 120 = 30 (like 120÷4)

→ 75% of a number, first find 25% of # then multiply answer by 3 to get 75% of #

Ex) 75% of 240

↓ start with

25% of 240 = 60 (x3)

x3

75% of 240 = 180

Mentally % of # continued

50% of a number is like ÷ # by 2

Ex) 50% of 140 = 70
(like 140 ÷ 2)

1% of a number is like ÷ # by 100

Ex) 1% of 180 = 1.80

→ use this to get multiples 2%, 3%, 4%...
by multiplying answer by factor

Ex) 7% of 2800 =

↓ start with 1% of 2800 = 28
(×7) (×7)

7% of 2800 = 196

15% of number → find 10% of number
then
5% of number
Then add answers

Ex) 15% of 200

↓ start with 10% of 200 = 20
(÷2) (÷2)

5% of 200 = 10

15% of 200 = (20+10) = 30

Tax $ = 15% x Price
↓ use decimal
= 0.15 x Price

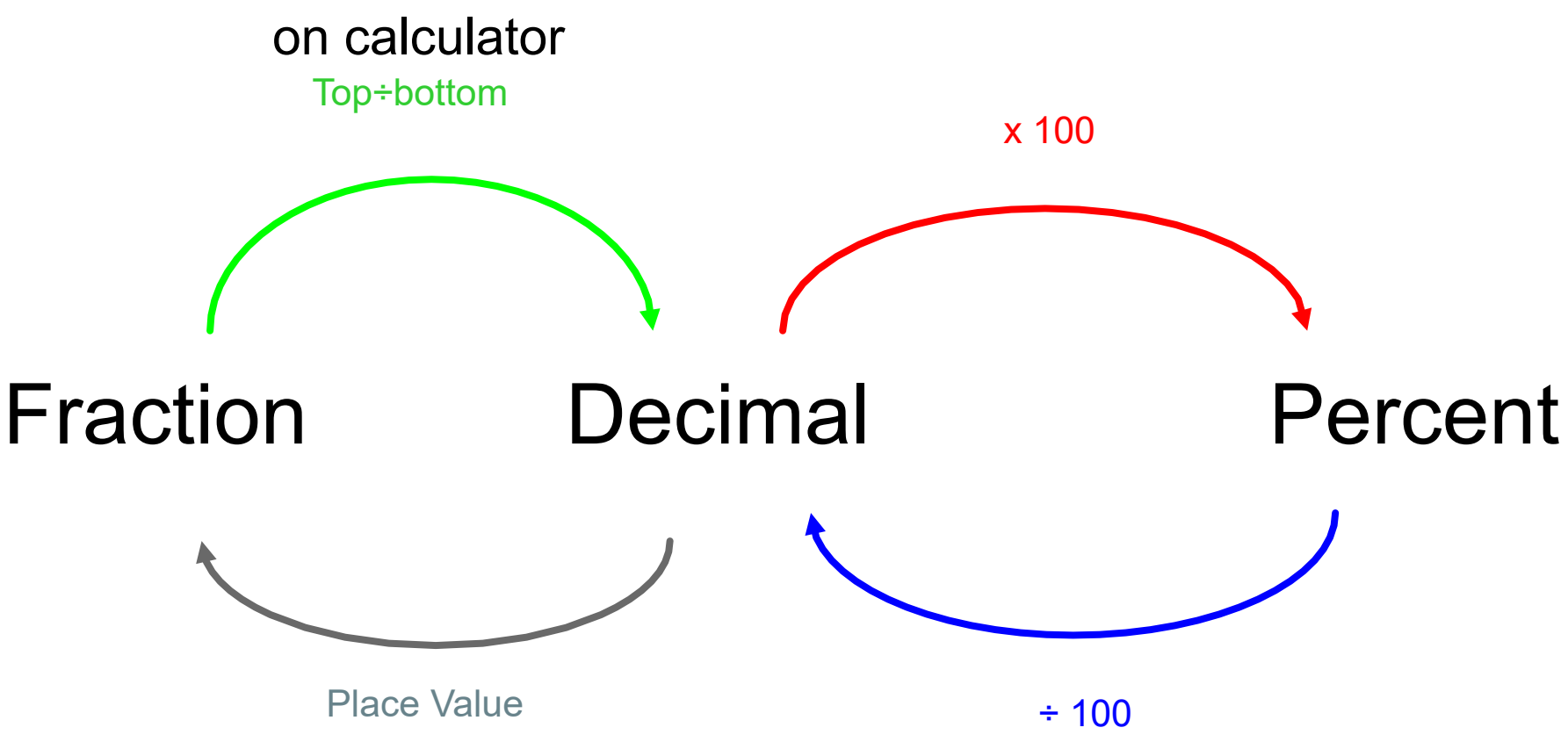
Cost with Tax = Price + Tax $

Save
Discount $ = % x Price
↓ use decimal
x Price

Sales Price = Price − Saved Discount $

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

Remember
Difference
= Big - Small



Ex1) $\frac{13}{1000}$ Top÷bottom = 0.013 x 100 = 1.3%

or take to equivalent fraction of over 100

$\frac{2}{25}$ x4 $\frac{8}{100}$ = 8% =0.08

Ex 2) 0.7 dec

place value

(Stops in tenths place so over 10)

x 100

= 70%

Percent

Fraction

Ex3) 0.0081 dec

$\frac{81}{10\,000}$

10

stops 4 Places after decimal so bottom is 10 000