Warm Up Grade 8

Oct. 23

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

≈ 30% of 30

= 9

Sale Price

30 − 9 = ≈ $21

2. a) 40% of 9.98

0.4×9.98

3.99

≈ 40% of 10

4

b) 96% of 5

0.96×5

4.80

≈ 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

≈ 10% of 20

2

e) 5% of 3.25

0.05×3.25

0.1625

= 0.16

≈ 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

≈ 20% of 90

18

g) 29% of 1500

0.29×1500

435

≈ 30% of 1500

10% of 1500 = 150

30% of 1500 = 450

h) 33.3% of 15

0.333×15

4.995

= 5

≈ $\frac{1}{3}$ 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

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

Difference = Big - Small
= $28 - $19.60
= $8.40

% Diff = Diff / orig x 100
= $8.40 / $28 x 100

divide on cal

= 0.3 x 100
= 30 %

Coffee maker was on sale for 30% off.

Regular price $0.25

Sales Price $0.17

Find the % discounted?

Diff = Big - Small
= $0.25 - $0.17
= $0.08

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

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

$$= 0.32 \times 100$$

$$= 32\%$$

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

Test Outline

5 Multiple Choice

5 Short Response

1) Chart - Change Percents/Decimals/Fractions

2) Mentally explain

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

Homework Sheet 247 # 4-6

Save for tomorrow

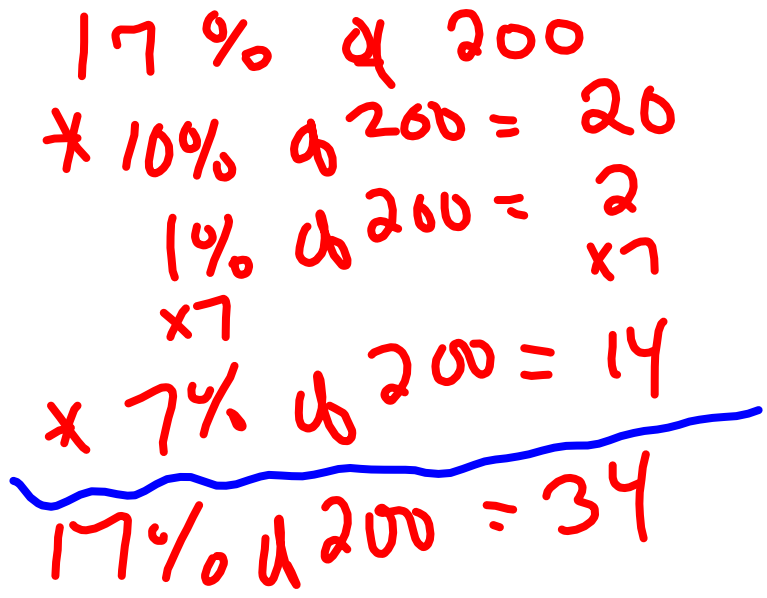
WS 115 #1(use strategies 1%, 10%, 25%, 50%,..)

2

#3

#4

#5



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

→ 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)

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)

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

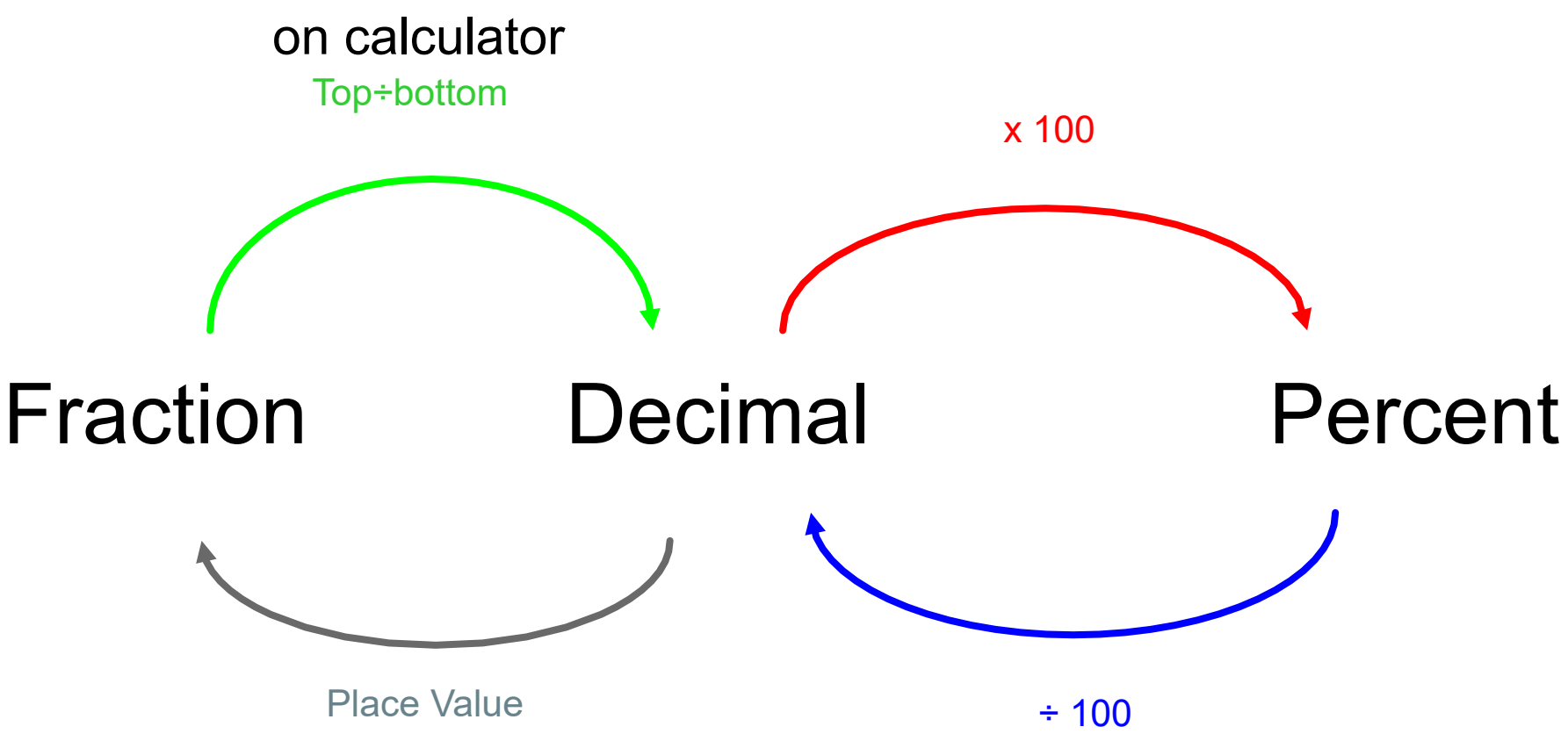
Cost with Tax = Price + Tax $

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 $= 1.3\%$

Ex 2) 0.7 dec

place value

(Stops in tenths place so over 10)

$= \frac{7}{10}$ Fraction

x 100

$= 70\%$ Percent

ex3) 0.0081 dec

stops 4 Places after decimal so bottom is 10 000

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

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