Name : _____ Score : _____

Teacher : _____ Date : _____

Converting Between Percents, Decimals, and Fractions

Convert Decimal to Percent – multiply by 100 or move decimal point 2 spots right.

0.737 =	1.19 =	0.713 =
0.324 =	0.63 =	0.548 =

Convert Percent to Decimal – divide by 100 or move decimal point 2 spots left.

91 % =	59 % =	65.3 % =
184 % =	62 % =	190 % =

Convert Decimal to Fraction – Remember your place values

0.917 =	1.47 =	0.43 =
0.39 =	1.65 =	1.5 =

Convert Fraction to Decimal – you can divide the fraction to change denominator to 10 or 100. make a decimal.

$\frac{4}{20}$ =	$\frac{47}{50}$ =	$\frac{87}{50}$ =
$\frac{59}{50}$ =	$\frac{15}{16}$ =	$\frac{2}{10}$ =

Convert Fraction to Percent – change to decimal first!

$\frac{7}{8}$ =	$\frac{5}{50}$ =	$\frac{5}{25}$ =
$\frac{9}{10}$ =	$\frac{1}{8}$ =	$\frac{30}{50}$ =

Convert Percent to Fraction – change to decimal first!

148 % =	88.8 % =	5 % =
142 % =	33.7 % =	79 % =

Adding and Subtracting Decimals Name:

Solve each problem. Remember to line up the decimal points when you are showing your work!

1) Jonathan downloaded two apps on his phone which were 12.48 mb total. If one app was 2.98 mb, how big was the other app? Reread the problem so you know it is subtraction!

Make sure you line up the decimal point!

$$\begin{array}{r} {}^{0}{}^{11}{}^{1} \\ 12.48 \\ -\ 2.98 \\ \hline 9.50 \end{array}$$

9.50 mb

2) John and Rey were comparing the distance they ran while playing in the soccer tournament. If John ran 12.27 miles and Rey ran 5.7 miles, how far did they run total?

3) Ramiyah was measuring the daily sodium values of different foods. If a soda has 32.78% the daily value and fries have 35.3% the daily value, how much would they have together?

4) Ramiyah weighed the candy she got from Halloween and compared it to how much Kiana received. Together they received 9.29 pounds of candy. If Kiana's amount was 2.89 pounds, how much was Ramiyah's?

5) Makaila was measuring how much taller she got over the last two years. In the first year she grew 2.27 cm. In the second year she grew 7.8 cm. How much taller did she get altogether?

Multiplying Decimals Name:

Solve each problem. Remember, you can multiply without the decimal points. Just remember to add the decimal point in the answer based on how many decimal places you had in the factors.

1) A bakery used 4 cups of flour to make a full size cake. If they wanted to make a cake that was 0.5 the size, how many cups of flour would they need?

2) Ja'kya can read 3.5 pages of a book in a minute. If she reads for 15 minutes, how much would she have read?

3.5 x 15 ignore decimals and multiply

35 x 15
25
150
50
+300
525

52.5 pages

There was 1 decimal place in the 2 numbers I multiplied, so there should be 1 decimal place in the answer.

3) A new washing machine used 2.47 liters of water per full load to clean clothes. If George washed 4.7 loads of clothes, how many liters of water would be used?

4) At the animal shelter 40 % of the animals are cats. Of the Cats, 51 % are male. What percent of the animals at the shelter are male cats?

5) Each day a carwash used 4.70 gallons of soap. After 2 days, how much soap would they have used?

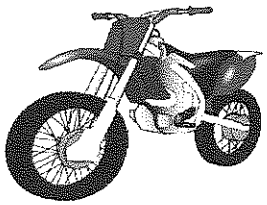
Name: _____ Core: _____

Percent Word Problems

You can use a calculator. Write down what expression you typed into your calculator to show your work.

Question 1

The price of a motorbike is $ 1,500. How much do you need to pay if you get a 10% discount?



% off problem

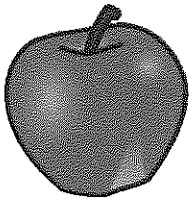
10 % ÷ 100 x $1500 = $150 off/discount

(change to decimal)

$1500 - $150 = $1350

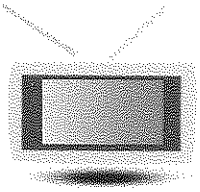
Question 2

The price of an apple is $ 1.25. If you get 20% discount, how much do you have to pay if you buy five apples?



Question 3

You have only $ 1,000. The price of a new Ultra High Definition TV is $1,150. Can you buy the TV if you get 10% discount?



Question 4

Kanye has $ 200. The price of a gold watch is $ 120. If Kanye gets a 25% discount, can he buy two watches?

Question 5

The price of a new cell phone is $ 450 at Sprint and $500 at Verizon. If you get 15% discount at Verizon, which store would you buy the phone from (both shops are next to each other)?

Dividing Decimals with Partial Quotients

Name:

Solve each problem. Round your answer to the nearest tenth.

1) $0.3\overline{)2.51}$

I want this number to be a whole number. If I change 1 number, I have to change the other number the same!

$$3\overline{)25.10} \quad 08.36\ldots$$
$$-24$$
$$1\,1$$
$$-\,9$$
$$2\,0$$
$$-18$$
$$2$$

2) $0.7\overline{)5.21}$

3) $0.8\overline{)43.0}$

4) $0.7\overline{)79.6}$

5) $0.4\overline{)38.6}$

6) $0.8\overline{)0.583}$

Answers

1. 8.36 rounded to nearest tenth is (8.4)
2. _____
3. _____
4. _____
5. _____
6. _____

1-6	83	67	50	33	17	0

Multiplying and Dividing Powers of Ten

Name:

Solve each problem.

5.47×10^4

This is the same as saying:
$5.47 \times (10 \times 10 \times 10 \times 10)$
And because the base is 10 you can just move the decimal 4 places to the right to solve.

5 4 7 0 0.

$5.47 \times 10^4 = 54{,}700$

$2.36 \div 10^2$

Division is the same way. Only instead of moving the decimal right, you move it left.

.0 2 3 6

1) $8.5 \div 10^1$

2) 248.92×10^4

3) $1.28 \div 10^3$

4) 498.32×10^3

5) $415.95 \div 10^2$

6) 52.8×10^4

7) $582.61 \div 10^1$

8) 8.15×10^1

9) $4.7 \div 10^3$

10) 9.849×10^3

11) $9.969 \div 10^2$

12) 6.72×10^2

13) $61.423 \div 10^2$

14) 144.717×10^3

15) $884.4 \div 10^2$

16) 79.5×10^4

17) $6.14 \div 10^4$

18) 3.595×10^4

19) $66.5 \div 10^2$

20) 74.3×10^1

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____

1-10	95	90	85	80	75	70	65	60	55	50
11-20	45	40	35	30	25	20	15	10	5	0