M8-4.1-Fractions->Decimals HW
Convert from fractions to decimals.
$\frac{1}{10}=0.1$
$\frac{1}{2}=\frac{5}{10}=0.5$
$\frac{1}{5}=$
$\frac{1}{4}=$
$\frac{2}{5}=$
$\frac{3}{20}=$
$\frac{3}{5}=$
$\frac{4}{5}=$
$\frac{3}{4}=$
$\frac{1}{20}=$
$\frac{1}{25}=$
$\frac{2}{25}=$
$\frac{3}{25}=$
$\frac{3}{50}=$
$\frac{7}{50}=$
$\frac{3}{100}=$
$\frac{3}{1000}=$
$\frac{1}{500}=$
$\frac{303}{1000}=$
$\frac{31}{100}=$

Convert from fractions to repeating decimals.
$\frac{1}{9}=0 . \overline{1}$
$\frac{2}{3}=$
$\frac{1}{3}=$
$\frac{1}{6}=$
$\frac{4}{9}=$
$\frac{5}{6}=$
$\frac{2}{9}=$
$\frac{7}{9}=$
$\frac{5}{9}=$
$\frac{8}{9}=$

Convert from mixed fractions to decimals.
$1 \frac{1}{3}=1+0 . \overline{3}=1 . \overline{3}$
$2 \frac{1}{2}=$
$5 \frac{1}{5}=$
$3 \frac{1}{4}=$
$4 \frac{3}{4}=$
$3 \frac{2}{5}=$
$5 \frac{2}{3}=$
$3 \frac{1}{9}=$
$4 \frac{2}{9}=$

Convert from an improper fraction to a mixed fraction, then to a decimal.
$\frac{11}{5}=2 \frac{1}{5}=2.2$
$\frac{3}{2}=$
$\frac{5}{2}=$
$\frac{7}{2}=$
$\frac{9}{2}=$
$\frac{4}{3}=$
$\frac{5}{3}=$
$\frac{7}{3}=$
$\frac{8}{3}=$ $\frac{5}{4}=$
$\frac{7}{6}=$
$\frac{7}{4}=$
$\frac{9}{4}=$
$\frac{8}{5}=$
$\frac{7}{5}=$
$\frac{10}{9}=$
$\frac{9}{5}=$
$\frac{6}{5}=$

## M8-4.1-Fractions->Decimals HW

Convert from fractions to decimals using long division or your calculator, to three decimal places.
$\frac{1}{6}=0.1 \overline{6}$
$\frac{1}{8}=0.125$
$\frac{5}{6}=$
$\frac{5}{7}=$
$\frac{7}{8}=$
$\frac{2}{11}=$
$\frac{3}{11}=$
$\frac{3}{7}=$
$\frac{6}{7}=$
$\frac{1}{11}=$
$\frac{4}{7}=$
$\frac{3}{8}=$
$\frac{1}{7}=$
$\frac{2}{7}=$
$\frac{8}{7}=$
$\frac{9}{7}=$
$\frac{10}{7}=$

## M8-4.1-Decimals->Fractions HW

## Convert from decimals to fractions

$0.1=\frac{1}{10}$
$0.5=\frac{5}{10}=\frac{1}{2}$
$0.2=$
$0.25=$
$0.4=$
$0.15=$
$0.6=$
$0.8=$
$0.75=$
$0.05=$
$0.04=$
$0.08=$
$0.12=$
$0.06=$
$0.14=$
$0.03=$
$0.003=$
$0.002=$
$0.303=$
$0.31=$

Convert from repeating decimals to fractions.
$0 . \overline{1}=\frac{1}{9}$
$0 . \overline{6}=$
$0 . \overline{3}=$
$0.1 \overline{6}=$
$0 . \overline{4}=$
$0.8 \overline{3}=$
$0 . \overline{2}=$
$0 . \overline{7}=$
$0 . \overline{5}=$
$0 . \overline{8}=$

Convert from decimals to mixed fractions.
$1 . \overline{3}=1 \frac{1}{3}$
$2.5=$
$5.2=$
$3.25=$
$3.4=$
$5 . \overline{6}=$
$3 . \overline{1}=$
4. $\overline{2}=$
$4.75=$

Convert from a decimal to a mixed fraction, then to an improper fraction.
$2.2=$
$1.5=$
$2.5=$
$3.5=$
$4.5=$
$1 . \overline{3}=$
$1 . \overline{6}=$
$2 . \overline{3}=$
$2 . \overline{6}=$
$1.25=$
$1.1 \overline{6}=$
$1.75=$
$2.25=$
$1.6=$
$1.2=$
$1.4=$

1. $\overline{1}=$
$1.8=$

## M8-4.1-Decimals->\% HW

## Convert from decimals to percentages.

| 0.1 = | $0.5=$ | $0.2=$ | $0.25=$ | $0.4=$ |
| :---: | :---: | :---: | :---: | :---: |
| $0.15=$ | $0.6=$ | $0.8=$ | $0.75=$ | $0.05=$ |
| $0.04=$ | $0.08=$ | $0.12=$ | $0.06=$ | $0.14=$ |
| $0.03=$ | $0.003=$ | $0.002=$ | $0.303=$ | $0.31=$ |
| $0.200=$ | $0.123=$ | $0.452=$ | $0.195=$ | $0.322=$ |
| $0.400=$ | $0.05=$ | $0.02=$ | $0.005=$ | $0.109=$ |
| $0.370=$ | $0.823=$ | $0.764=$ | $0.631=$ | $0.540=$ |

Convert from repeating decimals to repeating percentages.
$0 . \overline{1}=$
$0 . \overline{6}=$
$0 . \overline{3}=$
$0.1 \overline{6}=$
$0 . \overline{4}=$
$0.8 \overline{3}=$
$0 . \overline{2}=$
$0 . \overline{7}=$
$0 . \overline{5}=$
$0 . \overline{8}=$
$5 . \overline{6}=$
$3 . \overline{1}=$
$4 . \overline{2}=$
$2 . \overline{6}=$
$2 . \overline{3}=$
$1 . \overline{6}=$
$1.1 \overline{6}=$
$1 . \overline{3}=$
$1 . \overline{1}=$
$1 . \overline{3}=$

## Convert from decimals to percentages.

| $3.4=$ | $2.5=$ |  | $3.2=$ |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## M8-4.1-\%->Decimals HW

## Convert from a percentage to a decimal.

| $10 \%=0.1$ | 60\% $=0.6$ | 20\% = | 80\% = |
| :---: | :---: | :---: | :---: |
| 50\% = | $30 \%=$ | $70 \%=$ | $40 \%=$ |
| 90\% = | $25 \%=$ | $75 \%=$ | $89 \%=$ |
| $15 \%=$ | $32 \%=$ | $62 \%=$ | $45 \%=$ |
| 11. $\overline{1} \%=$ | $77 . \overline{7} \%=$ | $33 . \overline{3} \%=$ | $88 . \overline{8} \%=$ |
| $55.50=$ | $22 . \overline{2} \%=$ | $66 . \overline{6} \%=$ | 44. $\overline{4} \%$ |
| 150\% = | 120\% = | $125 \%=$ | $225 \%=$ |
| $1000 \%=$ | $570 \%=$ | $1200 \%=$ | $1250 \%=$ |
| $1 \%=$ | $2 \%=$ | $5 \%=$ | 0.3\% = |
| 0.5\% = | $0 . \overline{6} \%=$ | 9\% = | 7\% = |
| $14 \frac{1}{2} \%=$ | 128.7\% = | 25.2\% = | 130.4\% = |

## M8-4.1 - Fractions->\% HW

Convert from fractions to percentages.

| $\frac{4}{5}=\frac{80}{100}=0.8=80 \%$ | $\frac{1}{5}=\frac{2}{10}=0.2=20 \%$ | $\frac{2}{25}=$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
| $\frac{3}{20}=$ |  | $\frac{31}{100}=$ |  | $\frac{1}{2}=$ |  |
| $\frac{1}{25}=$ |  | $\frac{3}{5}=$ |  | $\frac{3}{25}=$ |  |
| $\frac{1}{10}=$ |  |  | $\frac{303}{1000}=$ |  | $\frac{1}{500}=$ |
| $\frac{2}{5}=$ |  |  | $\frac{3}{1000}=$ |  | $\frac{3}{50}=$ |
| $\frac{7}{50}=$ |  |  |  |  |  |
| $\frac{1}{4}=$ |  |  |  | $\frac{3}{4}=$ |  |
| 20 |  |  |  |  |  |

Convert from fractions to repeating percentages.
$\frac{5}{9}=$
$\frac{2}{3}=$
$\frac{1}{3}=$
$\frac{1}{6}=$
$\frac{2}{9}=$
$\frac{5}{6}=$
$\frac{7}{9}=$
$\frac{1}{9}=$
$\frac{4}{9}=$
$\frac{8}{9}=$

Convert from mixed fractions to percentages.
$4 \frac{3}{4}=$
$2 \frac{1}{2}=$
$5 \frac{2}{3}=$
$3 \frac{1}{4}=$
$3 \frac{1}{9}=$
$1 \frac{1}{3}=$
$3 \frac{2}{5}=$
$4 \frac{2}{9}=$
$5 \frac{1}{5}=$

Convert from an improper fraction to a mixed fraction, then to a percentage.

| $\frac{9}{4}=$ | $\frac{5}{2}=$ | $\frac{9}{5}=$ | $\frac{7}{2}=$ | $\frac{6}{5}=$ |
| :---: | :---: | :---: | :---: | :---: |
| $\frac{4}{3}=$ | $\frac{5}{3}=$ | $\frac{7}{6}=$ | $\frac{8}{3}=$ | $\frac{7}{4}=$ |
| $\frac{5}{4}=$ | $\frac{3}{2}=$ | $\frac{7}{5}=$ | $\frac{11}{5}=$ | $\frac{9}{2}=$ |
| $\frac{10}{9}=$ | $\frac{7}{3}=$ | $\frac{8}{5}=$ |  |  |

## M8-4.1-\%->Fractions HW

## Convert from a percentage to a fraction and simplify.

| 10\% = | $20 \%=$ | 30\% = | 40\% = |
| :---: | :---: | :---: | :---: |
| 50\% = | 60\% = | 70\% = | 80\% = |
| 90\% = | $25 \%=$ | $75 \%=$ | 89\% = |
| $15 \%=$ | $32 \%=$ | $62 \%=$ | $45 \%=$ |
| $150 \%=$ | 120\% = | 125\% = | 225\% = |
| 1000\% = | $570 \%=$ | 1200\% = | 1250\% = |

Express as a fraction over 9.
$11 . \overline{1} \%=$
$22 . \overline{2} \%=$
$33 . \overline{3} \%=$
$55 . \overline{5} \%=$
$66 . \overline{6} \%=$
$77 . \overline{7} \%=$
44. $\overline{4} \%$

Express as a fraction over 6.


Express as a fraction over 3.
$33.33 \%=\square 66.66 \%=$

# M8-4.2 - "is" over "of" = ?\% over 100 HW 

Calculate the following percentages.

12 is what \% of 100 ?

15 is what \% of 50?

20 is what \% of $\mathbf{2 0 0}$ ?

7 is what \% of 40?

70 is what \% of $\mathbf{1 2 0 ?}$

150 is what \% of 30 ?
36 is what \% of $108 ?$
30 is what \% of 50 ?

46 is what \% of $150 ?$
-

45 is what \% of 170 ?
30 is what \% of 120 ?

M8-4.2-\% "of" = "?is" HW

Calculate the following.

What is $20 \%$ of 200 ?
What is $15 \%$ of 800 ?
What is $2 \%$ of 300 ?

What is $0.50 \%$ of 10 ?
What is $12 \%$ of $15 ?$
What is $4 \%$ of 2 ?

What is $8 \%$ of $400 ?$
What is $250 \%$ of 500 ?
What is $1 \%$ of 100 ?

What is $2 \%$ of $200 ?$
What is $1.2 \%$ of $500 ?$
What is $7 \%$ of 7 ?

M8-4.2 - "is" \% "?of" HW

40 is $40 \%$ of what number?

40 is what percent of 200 ?

150 is $20 \%$ of what number?
$60 \%$ of what number is $48 ?$
$54 \%$ of what number is $5.4 ?$

30 is what percent of 150 ?

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |

30 is $60 \%$ of what number?

64 is what percent of 400 ?

80 is what percent of $640 ?$

## M8-4.2-Tax/Discount Word Problems Hard HW

What is the $12 \%$ tax on $\$ 80$ shoes?
What is the total cost?

What is the $14 \%$ tax on $\$ 100$ pants?
What is the total cost?

What is a $25 \%$ discount on a $\$ 200$ phone with no tax?

What is the cost of a $25 \%$ discount on a $\$ 200$ phone with $12 \%$ tax?

A 5\% discount on a computer is $\$ 190$.
How much was the original cost?

After a $12 \%$ tax, the price of a T.V is
\$297. What was the original cost?

Nick ate 3 more hotdogs than Bill which was $30 \%$ more. How many total hotdogs did they eat?

