Converting percentages, decimals and fractions worksheet.   Name:

1. DECIMALS TO PERCENTAGES. Express the following decimals as percentages – ask yourself how many hundredths there are in the decimal number if you are stuck.

$0.25 =$ ___% $0.42 =$ ___% $0.95 =$ ___% $0.01 =$ ___%

$0.74 =$ ___% $0.23 =$ ___% $0.17 =$ ___% $1 =$ ___%

2. FRACTIONS TO PERCENTAGES. Fill in the blanks. Multiply numerators and denominators by the **same number** to make equivalent fraction with 100 as denominator. Then express the fraction as a percentage.

$\dfrac{2}{5} = \dfrac{}{10} = \dfrac{}{100} =$ ___% $\dfrac{4}{20} = \dfrac{}{100} =$ ___% $\dfrac{1}{2} = \dfrac{}{10} = \dfrac{}{100} =$ ___%

$\dfrac{3}{4} = \dfrac{}{20} = \dfrac{}{100} =$ ___% $\dfrac{3}{20} = \dfrac{15}{} =$ ___% $\dfrac{1}{50} = \dfrac{}{100} =$ ___%

3. FRACTIONS TO PERCENTAGES. Divide numerator by denominator (calculators allowed), then multiply result by 100% to express result as a percentage.

$\dfrac{2}{8} = 2 \div 8 =$ ___ $\times 100\% =$ ___% $\dfrac{5}{16} = 5 \div 16 =$ ___ $\times 100\% =$ ___%

$\dfrac{4}{25} = 4 \div 25 =$ ___ $\times 100\% =$ ___% $\dfrac{64}{120} = 64 \div 120 =$ ___ $\times 100\% =$ ___%

4. PERCENTAGES TO FRACTIONS. Express these percentages as a fraction with a denominator of 100. Then simplify fraction to lowest possible equivalent fraction (by dividing by the **same number).**

$20\% = \dfrac{}{100} = \dfrac{}{5}$ $34\% = \dfrac{}{100} = \dfrac{}{50}$ $42\% = \dfrac{}{100} = \dfrac{}{50}$ $45\% = \dfrac{}{100} = \dfrac{9}{}$

$25\% = \dfrac{}{100} = \dfrac{1}{}$ $12\% = \dfrac{}{100} = \dfrac{}{50} = \dfrac{}{25}$ $8\% = \dfrac{}{100} = \dfrac{}{50} = \dfrac{2}{}$

5. EXTENSION: Two shops both usually charge the RRP (recommended retail price) for shirts, which is £23. But in the sales both run different promotions.
Shop 1 offers a 15% discount.
Shop 2 offers $\frac{1}{6}$ off RRP.   (a) What percentage of RRP do you have to pay at Shop 1?

(b) What fraction of RRP do you have to pay at Shop 2?

(c) What is the promotional price at each shop, and where should you buy your shirt?