Student Activity: To Investigate Fractions, Decimals and Percentages

Use in connection with the interactive file, 'Fractions Decimals Percentages', on the Student's CD.
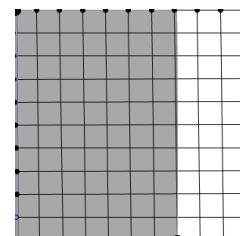
1)

    i)   How many squares wide and how many squares high is the given diagram?
_____

    ii)   What fraction of the above diagram is shaded?
_____

    iii)   What percentage of the given diagram is shaded?
_____

    iv)   What decimal value is represented by the shaded region?
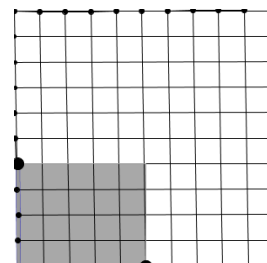
_____

2.

    What fraction of the given 10 X 10 diagram is shaded?
    i)   _____

    ii)   What percentage of the given 10 X 10 diagram is shaded?
_____

    iii)   What decimal value is represented by the shaded region of the diagram?
_____

3.

    i)   What fraction of the given 10 X 10 diagram is shaded?

_____

    ii)   What percentage of the given 10 X 10 diagram is shaded?

_____

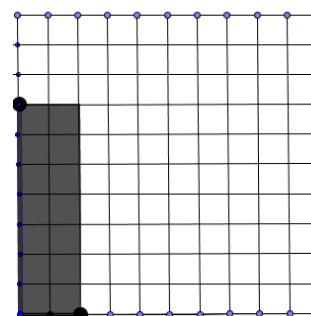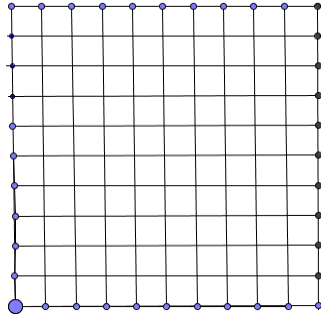   iii)   What decimal value is represented by the shaded region of the diagram?

4. In the diagrams below shade in the given fractions. Then <u>write the equivalent decimal and percentage in each case</u>:
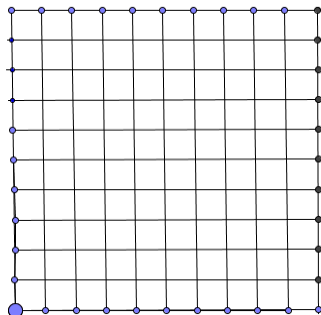
a)

$$\frac{80}{100}$$

Percentage Shaded =
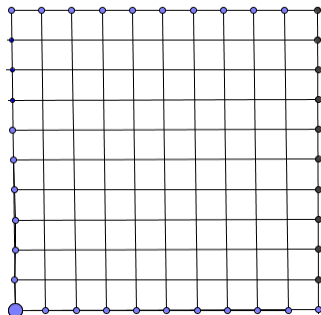
Decimal Value Shaded=

b)

$$\frac{1}{5}$$

Percentage Shaded =
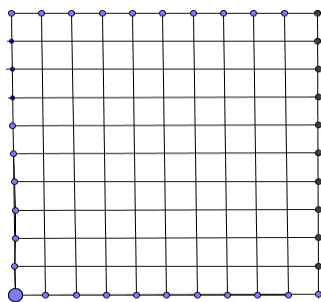
Decimal Value Shaded=

c)

$$\frac{1}{4}$$

Percentage Shaded =

Decimal Value Shaded=

d)

$$\frac{3}{4}$$

Percentage Shaded =

Decimal Value Shaded=

5. Which would be a better prize to win, 21% of a prize fund or $\frac{1}{5}$ of the same prize fund? Explain your answer.

    _____

    _____

6. Emer got 48 marks out of a total of 50 in a maths examination.

    a) What percentage of the maths examination did she get correct?

    _____

    b) What percentage of the maths examination did she get incorrect?

    _____

    c) What fraction of the maths examination did she get correct?

    _____

    d) What fraction of the maths examination she got incorrect?

    _____

    e) Write the amount of the maths examination she got correct as a decimal.

    _____

7. Which would you prefer to receive 0.7 of a prize or ¾ of the same prize? Explain your choice.

    _____

8. What fraction is 0·8 equal to?

    _____

9. Josephine has eaten 21 sweets out of a bag that contained 25 sweets.

    a) What fraction of the sweets in the bag has she eaten?

    _____

    b) What fraction of the sweets in the bag did Josephine not eat?

    _____

    c) What percentage of the sweets in the bag has she eaten?

    _____

    d) What percentage of the sweets in the bag did Josephine not eat?

    _____

10. Which is the bigger portion, ½ of a 12 inch pizza, or ¾ of a 9 inch pizza? Give a reason for your answer.