

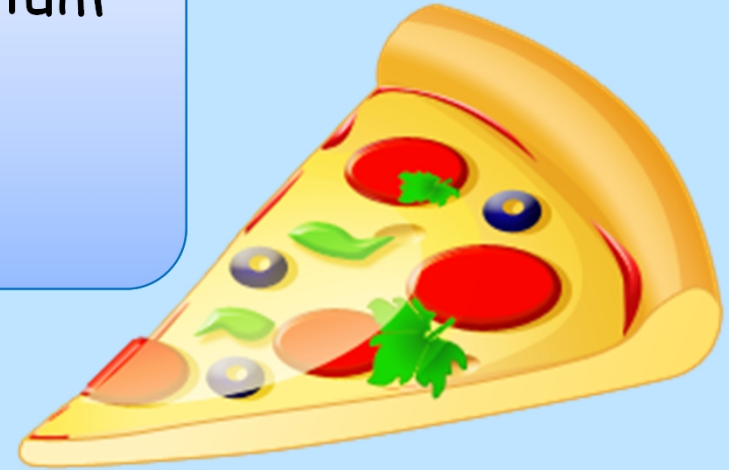
LO: Solve problems by calculating the area of a circle.

12" family-sized
pizza

£5.99

Two 8" medium
pizzas

£5.99



Task

By calculating the area of each pizza, work out which deal is best value for money.



Challenge

The family-sized pizza is cut into 12 slices. Which gets you more pizza, $\frac{1}{2}$ of a medium pizza or 3 slices of the family-sized pizza?



LO: Solve problems by calculating the area of a circle.

12" family-sized
pizza

Best
deal!

£5.99

Diameter = 12in
Radius = 6in

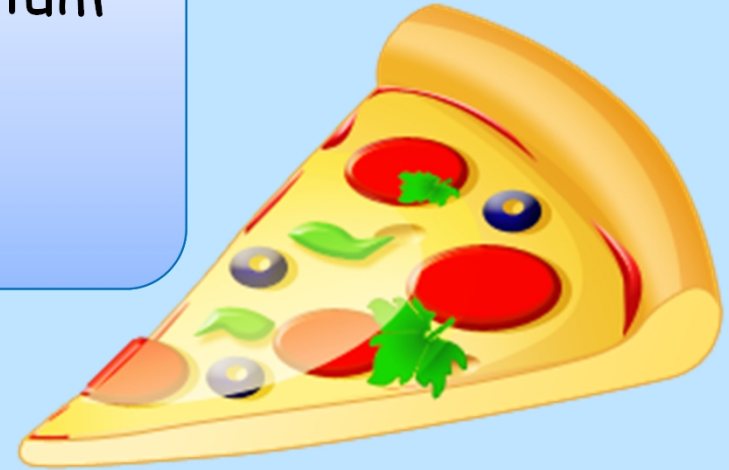
$$\text{Area} = \pi \times 6 \times 6 = 113\text{in}^2$$

Two 8" medium
pizzas

£5.99

Diameter = 8in
Radius = 4in

$$\begin{aligned}\text{Area} &= \pi \times 4 \times 4 = 50.26\dots\text{in}^2 \\ \text{So area of 2 pizzas} &= 101\text{in}^2\end{aligned}$$



LO: Solve problems by calculating the area of a circle.

12" family-sized
pizza

Best
deal!

£5.99

Cut into 12 slices

2 slices = $\frac{1}{6}$ of the pizza

$$\text{Area} = 113 \div 6 = 18.8\text{in}^2$$

Two 8" medium
pizzas

£5.99

Cut in half

Area of 1 pizza = 50.3in^2

Area of $\frac{1}{2}$ pizza = 12.6in^2

