Workout

Question 1: Simplify fully

(a) $\dfrac{2}{4}$ $\frac{1}{2}$ (b) $\dfrac{6}{9}$ $\frac{2}{3}$ (c) $\dfrac{6}{8}$ $\frac{3}{4}$ (d) $\dfrac{5}{15}$ $\frac{1}{3}$ (e) $\dfrac{4}{6}$ $\frac{2}{3}$ (f) $\dfrac{9}{12}$ $\frac{3}{4}$

(g) $\dfrac{10}{15}$ $\frac{2}{3}$ (h) $\dfrac{9}{15}$ $\frac{3}{5}$ (i) $\dfrac{8}{12}$ $\frac{2}{3}$ (j) $\dfrac{10}{14}$ $\frac{5}{7}$ (k) $\dfrac{15}{35}$ $\frac{3}{7}$ (l) $\dfrac{6}{21}$ $\frac{2}{7}$

(m) $\dfrac{18}{22}$ $\frac{9}{11}$ (n) $\dfrac{16}{20}$ $\frac{4}{5}$ (o) $\dfrac{9}{24}$ $\frac{3}{8}$ (p) $\dfrac{20}{30}$ $\frac{2}{3}$ (q) $\dfrac{8}{28}$ $\frac{2}{7}$ (r) $\dfrac{300}{500}$ $\frac{3}{5}$

Question 2: Cancel down each fraction to its simplest form

(a) $\dfrac{14}{35}$ $\frac{2}{5}$ (b) $\dfrac{8}{64}$ $\frac{1}{8}$ (c) $\dfrac{18}{24}$ $\frac{3}{4}$ (d) $\dfrac{75}{100}$ $\frac{3}{4}$ (e) $\dfrac{24}{80}$ $\frac{3}{10}$ (f) $\dfrac{6}{42}$ $\frac{1}{7}$

(g) $\dfrac{36}{66}$ $\frac{6}{11}$ (h) $\dfrac{18}{45}$ $\frac{2}{5}$ (i) $\dfrac{70}{120}$ $\frac{7}{12}$ (j) $\dfrac{49}{56}$ $\frac{7}{8}$ (k) $\dfrac{22}{110}$ $\frac{1}{5}$ (l) $\dfrac{18}{72}$ $\frac{1}{4}$

(m) $\dfrac{60}{140}$ $\frac{3}{7}$ (n) $\dfrac{45}{135}$ $\frac{1}{3}$ (o) $\dfrac{40}{360}$ $\frac{1}{9}$ (p) $\dfrac{64}{100}$ $\frac{16}{25}$ (q) $\dfrac{85}{35}$ $\frac{17}{7}$ (r) $\dfrac{48}{36}$ $\frac{4}{3}$

Question 3: Simplify fully

(a) $\dfrac{145}{225}$ $\frac{29}{45}$ (b) $\dfrac{190}{570}$ $\frac{1}{3}$ (c) $\dfrac{200}{288}$ $\frac{25}{36}$ (d) $\dfrac{230}{495}$ $\frac{46}{99}$ (e) $\dfrac{54}{333}$ $\frac{6}{37}$ (f) $\dfrac{96}{123}$ $\frac{32}{41}$

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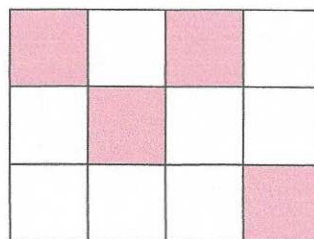**Question 1:** Which fractions below are equivalent to $\dfrac{2}{3}$?

$\boxed{\dfrac{4}{6}}$ $\dfrac{6}{8}$ $\boxed{\dfrac{8}{12}}$ $\dfrac{9}{12}$ $\boxed{\dfrac{10}{15}}$

Question 2: James says that $\dfrac{1}{3}$ of the grid is shaded

Cara says $\dfrac{4}{12}$ of the grid is shaded.

Explain how they are both correct.

$\dfrac{4}{12}$ simplifies to $\dfrac{1}{3}$

Question 3: Given that $5 \times 13 = 65$ and $7 \times 13 = 91$ simplify fully $\dfrac{65}{91}$ $\begin{array}{c} \div 13 \\ \div 13 \end{array} = \dfrac{5}{7}$

Question 4: Freddy has 40 cupcakes.
20 of the cupcakes are chocolate.
10 of the cupcakes are lemon.
8 of the cupcakes are strawberry.
The rest of the cupcakes of vanilla.

(a) What fraction of the cupcakes are chocolate?
Give the fraction in its simplest form. $\dfrac{1}{2}$

(b) What fraction of the cupcakes are lemon?
Give the fraction in its simplest form. $\dfrac{1}{4}$

(c) What fraction of the cupcakes are strawberry?
Give the fraction in its simplest form. $\dfrac{1}{5}$

(d) What fraction of the cupcakes are vanilla?
Give the fraction in its simplest form. $\dfrac{1}{20}$

Question 5: There are 200 students in a primary school.
80 students wear glasses.
What fraction of the students wear glasses?
Give the fraction in its simplest form. $\dfrac{80}{200} = \dfrac{2}{5}$

Question 6: Sarah has £240 and she gives her mum £80.
What fraction of the money does Sarah have left?
Give the fraction in its simplest form.

$240 - 80 = 160$

$\dfrac{160}{240} = \dfrac{2}{3}$