Exam Style Questions Adding Fractions

Ensure you have: Pencil, pen, ruler, protractor, pair of compasses and eraser
You may use tracing paper if needed

## Guidance

1. Read each question carefully before you begin answering it.
2. Don't spend too long on one question.
3. Attempt every question.
4. Check your answers seem right.
5. Always show your workings

## Revision for this topic

www.corbettmaths.com/contents
Video 133


1. Work out, as a simplified fraction.

$$
\frac{3}{4}+\frac{1}{12} \quad \frac{9}{12}+\frac{1}{12}=\frac{10}{12}=\frac{5}{6}
$$

$$
\frac{5}{6}
$$

(2)
2. Work out, as a simplified fraction.

$$
\frac{3}{5}-\frac{2}{7}
$$

$$
\frac{21}{35}-\frac{10}{35}=\frac{11}{35}
$$

$$
\frac{11}{35}
$$

(2)
3. Work out, as a simplified fraction.

$$
\frac{5}{6}-\frac{1}{2} \quad \frac{5}{6}-\frac{3}{6}=\frac{2}{6}=\frac{1}{3}
$$

4. Work out, as a simplified fraction.

$$
\frac{3}{4}-\frac{2}{5} \quad \frac{15}{20}-\frac{8}{20}=\frac{7}{20}
$$

$$
\frac{7}{20}
$$

(2)
5. Work out, as a simplified fraction.

$$
\begin{array}{r}
\frac{3}{4}+\frac{2}{9} \frac{27}{36}+\frac{8}{36}=\frac{35}{36} \\
\frac{\frac{35}{36}}{3}
\end{array}
$$

(2)
6. Work out, as a mixed number.

$$
\begin{array}{r}
\frac{7}{11}+\frac{2}{3} \quad \frac{21}{33}+\frac{22}{33}=\frac{43}{33} \\
1 \frac{10}{33}
\end{array}
$$

7. Work out

$$
1 \frac{2}{5}+2 \frac{1}{2}
$$

Give your answer as a mixed number.

$$
\begin{aligned}
& \frac{7}{5}+\frac{5}{2} \\
& \frac{14}{10}+\frac{25}{10}=\frac{39}{10} \quad 3 \frac{9}{10}
\end{aligned}
$$

(3)
8. Work out

$$
4 \frac{1}{3}-3 \frac{4}{9}
$$

Give your answer as a fraction.

$$
\begin{align*}
& \frac{13}{3}-\frac{31}{9} \\
& \frac{39}{9}-\frac{31}{9}=\frac{8}{9} \tag{8}
\end{align*}
$$

(3)
9. In a bag there are red, green and purple counters.
$3 / 8$ of the counters are red.
$1 / 6$ of the counters are green.
What fraction of the counters are purple?

$$
\begin{aligned}
& \frac{3}{8}+\frac{1}{6}=\frac{9}{24}+\frac{4}{24}=\frac{13}{24} \\
& 1-\frac{13}{24}=\frac{24}{24}-\frac{13}{24}=\frac{11}{24} \frac{11}{24}
\end{aligned}
$$

10. Matthew is training for a race.

He runs 3 days in one week.
Matthew runs $11 / 2$ miles on Monday.
Then he runs $12 / 3$ miles on Thursday.
Finally he runs $21 / 5$ miles on Sunday.
Work out how far Matthew ran in total.

$$
\begin{aligned}
& 1 \frac{1}{2}+1 \frac{2}{3}+2 \frac{1}{5} \\
& \frac{3}{2}+\frac{5}{3}+\frac{11}{5} \\
& \frac{45}{30}+\frac{50}{30}+\frac{66}{30}=\frac{161}{30} \quad 5 \frac{11}{30}
\end{aligned}
$$

11. Martin is walking from Antrim to Randalstown.

(a) Work out the distance from Antrim to Randalstown.

$$
\begin{aligned}
& \frac{3}{4}+3 \frac{1}{3} \\
& \frac{7}{4}+\frac{10}{3} \\
& \frac{21}{12}+\frac{40}{12}=\frac{61}{12}
\end{aligned}
$$

(b) Work out the distance from Randalstown to Come.

$$
\begin{aligned}
& 9 \frac{1}{4}-1 \frac{3}{4} \\
& \frac{37}{4}-\frac{7}{4}=\frac{30}{4}=\frac{15}{2}
\end{aligned}
$$

$$
7 \frac{1}{2}
$$

miles
(3)
12. Hannah is baking two cakes.

One cake needs $11 / 3$ cups of milk. Hannah has $11 / 4$ cups of milk.

## $2 \frac{2}{3}$ two cakes

How much more milk does Hannah need?

$$
\begin{align*}
& 2 \frac{2}{3}-1 \frac{1}{4} \\
& \frac{8}{3}-\frac{5}{4} \\
& \frac{32}{12}-\frac{15}{12}=\frac{17}{12}
\end{align*}
$$

13. Jessica wants to attach ribbon around her wardrobe.


She has 4 metres of ribbon.
How much more does she need?
Give your answer as a fraction.

$$
\begin{array}{rlr} 
& 1 \frac{3}{4}+1 \frac{3}{4}+\frac{2}{3}+\frac{2}{3} & \frac{58}{12}=4 \frac{5}{6} \\
= & \frac{7}{4}+\frac{7}{4}+\frac{2}{3}+\frac{2}{3} \\
= & \frac{14}{4}+\frac{4}{3}=\frac{42}{12}+\frac{16}{12} \quad \frac{5}{6}
\end{array}
$$

14. Work out

$$
\frac{2 \pi}{9}+\frac{\pi}{4}
$$

Give your answer as a fraction.

$$
\begin{aligned}
& \frac{2 \pi}{9}+\frac{\pi}{4} \\
& \frac{8 \pi}{36}+\frac{94}{36}=\frac{17 \pi}{36}
\end{aligned}
$$

$$
\frac{17 \pi}{36}
$$

