

Name:

Exam Style Questions

Adding Fractions



Corbettmaths

Equipment needed: Calculator, pen

Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Video Tutorial

www.corbettmaths.com/contents

Video 133



Answers and Video Solutions



1. Work out, as a simplified fraction.



$$\frac{3}{4} + \frac{1}{12}$$

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

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

(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.



$$\frac{5}{6} - \frac{1}{2}$$

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

$$= \frac{1}{3}$$

$$\frac{1}{3}$$

(2)

4. Work out, as a simplified fraction.



$$\frac{3}{4} - \frac{2}{5}$$

$$\frac{15}{20} - \frac{8}{20} = \frac{7}{20}$$

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

(2)

5. Work out, as a simplified fraction.



$$\frac{3}{4} + \frac{2}{9}$$

$$\frac{27}{36} + \frac{8}{36} = \frac{35}{36}$$

$$\frac{35}{36}$$

(2)

6. Work out



$$\frac{13}{24} - \frac{1}{4}$$

$$\frac{13}{24} - \frac{6}{24} = \frac{7}{24}$$

$$\frac{7}{24}$$

(2)

7. Work out



$$\frac{1}{10} + \frac{2}{3}$$

Circle the correct answer.

$$\frac{3}{30} + \frac{20}{30} = \frac{23}{30}$$

$$\frac{3}{13}$$

$$\frac{23}{30}$$

$$\frac{1}{15}$$

$$\frac{23}{13}$$

(1)

8. Work out



$$\frac{11}{12} + \frac{5}{6}$$

Give your answer as a mixed number.

$$\frac{11}{12} + \frac{10}{12} = \frac{21}{12}$$

$$1 \frac{9}{12}$$

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

(3)

9. Work out, as a mixed number.



$$\frac{7}{11} + \frac{2}{3}$$

$$\frac{21}{33} + \frac{22}{33} = \frac{43}{33}$$

$$1 \frac{10}{33}$$

$$1 \frac{10}{33}$$

(2)

10. Work out



$$\frac{2}{9} + \frac{5}{6} + \frac{1}{3}$$

$$\frac{4}{18} + \frac{15}{18} + \frac{6}{18} = \frac{25}{18}$$

$$= 1\frac{7}{18}$$

$$1\frac{7}{18}$$

.....
(3)

11. Calculate



$$\frac{41}{50} - \frac{5}{12}$$

.....
(1)

12. In a bag there are red, green and purple counters.



$\frac{3}{8}$ of the counters are red.

$\frac{1}{6}$ of the counters are green.

What fraction of the counters are purple?

$$\frac{3}{8} + \frac{1}{6}$$

$$\frac{24}{24} - \frac{13}{24} = \frac{11}{24}$$

$$\frac{9}{24} + \frac{4}{24} = \frac{13}{24}$$

$$\frac{11}{24}$$

(3)

13. A hockey team won $\frac{2}{5}$ of their matches.



They drew $\frac{1}{3}$ of their matches.

What fraction of the matches did they lose?

$$\frac{2}{5} + \frac{1}{3}$$

$$\frac{15}{15} - \frac{11}{15} = \frac{4}{15}$$

$$\frac{6}{15} + \frac{5}{15} = \frac{11}{15}$$

(3)

14. Nina is writing a story.



At the start of June, the story was $\frac{1}{8}$ complete.

At the end of June, the story was $\frac{2}{3}$ complete.

What fraction of the story did Nina write in June?

$$\frac{2}{3} - \frac{1}{8}$$

$$\frac{16}{24} - \frac{3}{24} = \frac{13}{24}$$

$$\frac{13}{24}$$

(2)

15. Work out



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

Give your answer as a mixed number.

$$\frac{7}{5} + \frac{5}{2}$$

$$\frac{14}{10} + \frac{25}{10} = \frac{39}{10}$$

$$3\frac{9}{10}$$

(3)

16. Work out



$$8\frac{5}{6} - 3\frac{1}{3}$$

Give your answer as a mixed number.

$$\frac{53}{6} - \frac{10}{3}$$

$$\frac{53}{6} - \frac{20}{6} = \frac{33}{6}$$

$$= 5\frac{3}{6}$$

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

(3)

17. Work out



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

Give your answer as a fraction.

$$\frac{13}{3} - \frac{31}{9}$$

$$\frac{39}{9} - \frac{31}{9} = \frac{8}{9}$$

$$\frac{8}{9}$$

(3)

18. Calculate



$$\frac{9}{14} + 5\frac{37}{88}$$

Give your answer as a mixed number.

.....
(2)

19. Matthew is training for a race.



He runs 3 days in one week.

Matthew runs $1\frac{1}{2}$ miles on Monday.

Then he runs $1\frac{2}{3}$ miles on Thursday.

Finally he runs $2\frac{1}{5}$ miles on Sunday.

Work out how far Matthew ran in total.

$$1\frac{1}{2} + 1\frac{2}{3} + 2\frac{1}{5}$$

$$\frac{3}{2} + \frac{5}{3} + \frac{11}{5}$$

$$\frac{45}{30} + \frac{50}{30} + \frac{66}{30} = \frac{161}{30}$$

$$= 5\frac{11}{30}$$

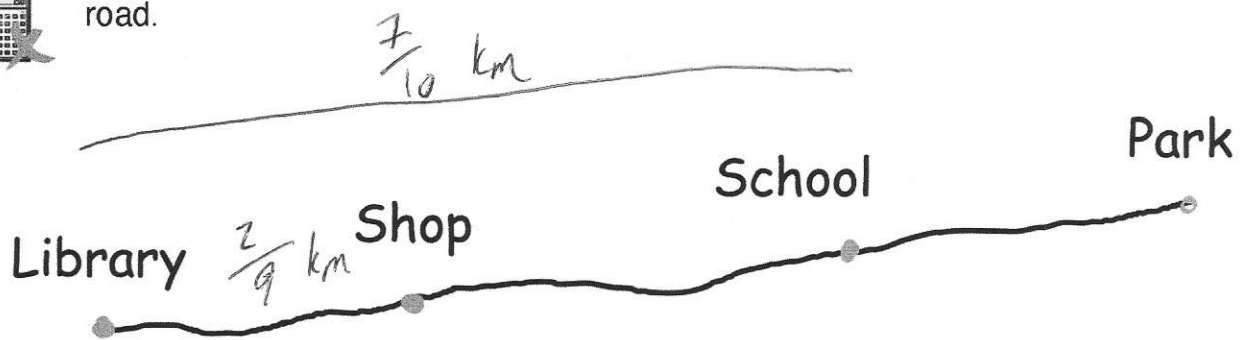
$$\begin{array}{r} 45 \\ 50 \\ + 66 \\ \hline 161 \end{array}$$

$$5\frac{11}{30} \text{ miles}$$

.....

(4)

20. The diagram shows how a library, shop, school and park are situated on a road.



The distance from the library to the park is 1 km

The distance from the shop to the park is $\frac{7}{9}$ km

The distance from the library to the school is $\frac{7}{10}$ km

Work out the distance from the shop to the school.

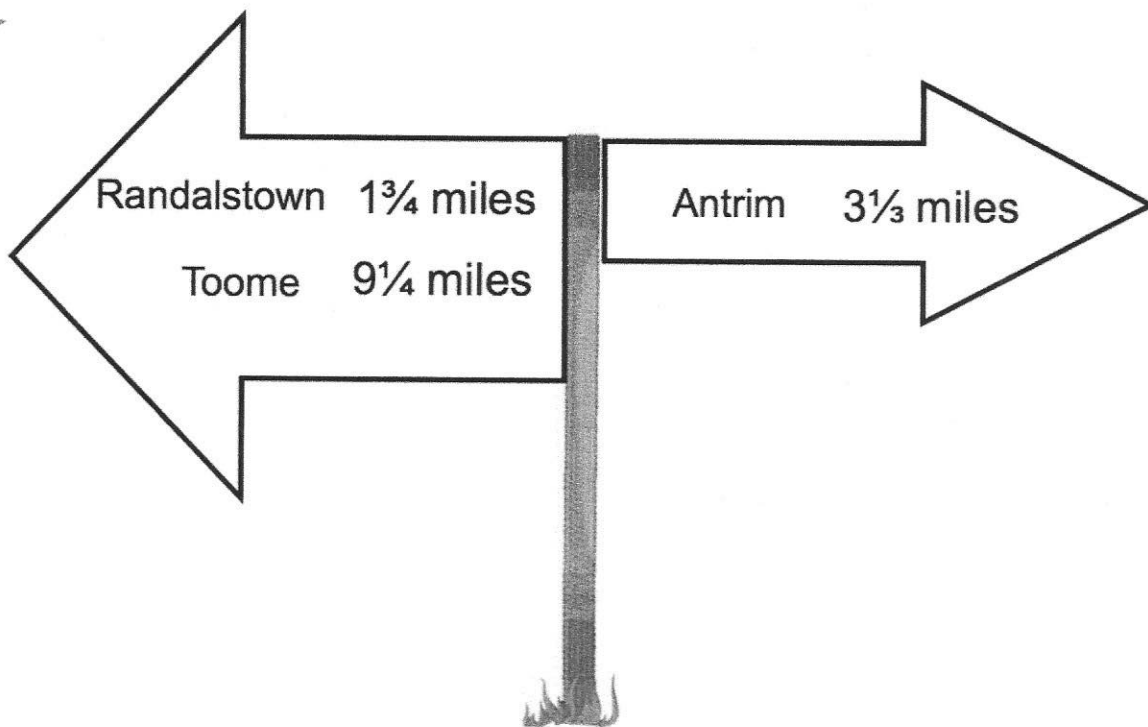
$$\frac{7}{10} - \frac{2}{9}$$

$$\frac{63}{90} - \frac{20}{90} = \frac{43}{90}$$

$$\frac{43}{90} \text{ km}$$

(3)

21. Martin is walking from Antrim to Randalstown.



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

$$1\frac{3}{4} + 3\frac{1}{3}$$

$$\frac{7}{4} + \frac{10}{3}$$

$$\frac{21}{12} + \frac{40}{12} = \frac{61}{12}$$

$$5\frac{1}{12} \text{ miles} \quad (3)$$

- (b) Work out the distance from Randalstown to Toome.

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

$$\frac{37}{4} - \frac{7}{4} = \frac{30}{4}$$

$$\frac{15}{2}$$

$$7\frac{1}{2} \text{ miles} \quad (3)$$

22. Hannah is baking two cakes.



One cake needs $1\frac{1}{3}$ cups of milk.

Hannah has $1\frac{1}{4}$ cups of milk.

How much more milk does Hannah need?

$$2 \times \left(1\frac{1}{3}\right) = 2\frac{2}{3}$$

$$2\frac{2}{3} - 1\frac{1}{4}$$

$$\frac{8}{3} - \frac{5}{4}$$

$$\frac{32}{12} - \frac{15}{12} = \frac{17}{12}$$

$$1\frac{5}{12}$$

.....cups
(3)

23. Jessica wants to attach ribbon around her wardrobe.



$$\boxed{} \frac{2}{3} \text{ m}$$

$$1\frac{3}{4} \text{ m}$$

She has 4 metres of ribbon.

How much more does she need?

Give your answer as a fraction.

$$1\frac{3}{4} + 1\frac{3}{4} + \frac{2}{3} + \frac{2}{3}$$

$$\frac{7}{4} + \frac{7}{4} + \frac{2}{3} + \frac{2}{3}$$

$$\frac{21}{12} + \frac{21}{12} + \frac{8}{12} + \frac{8}{12} = \frac{58}{12}$$

$$\frac{29}{6} = 4\frac{5}{6}$$

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

.....m
(4)

$$4\frac{5}{6} - 4$$

24. Work out



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

Give your answer as a fraction.

$$\frac{8\pi}{36} + \frac{9\pi}{36}$$

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

.....
(2)