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

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

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

Circle the correct answer.

$\frac{3}{13}$ $\frac{23}{30}$ $\frac{1}{15}$ $\frac{23}{13}$

(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

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

$\frac{121}{300}$

.....

(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?

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

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

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

$\frac{11}{24}$

.....

(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?

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

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

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

.....

(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.

3735/616

$6\frac{39}{616}$

(2)

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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.

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

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

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

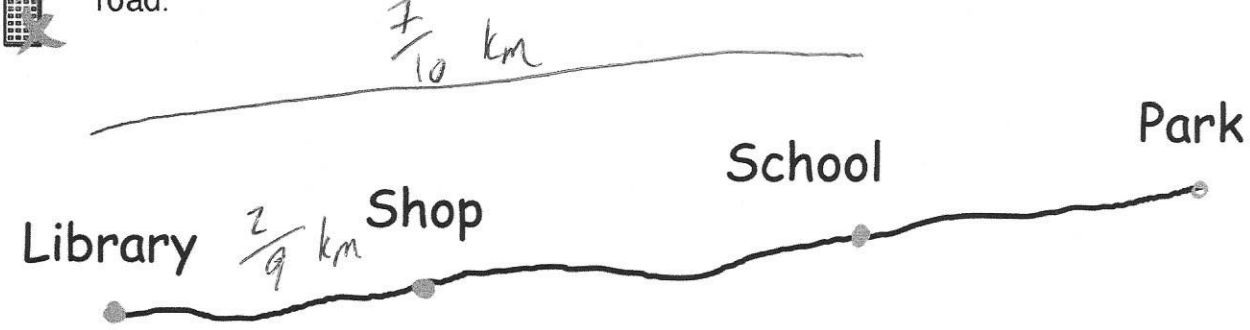
$= 5\frac{11}{30}$

45
50
+66
161

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

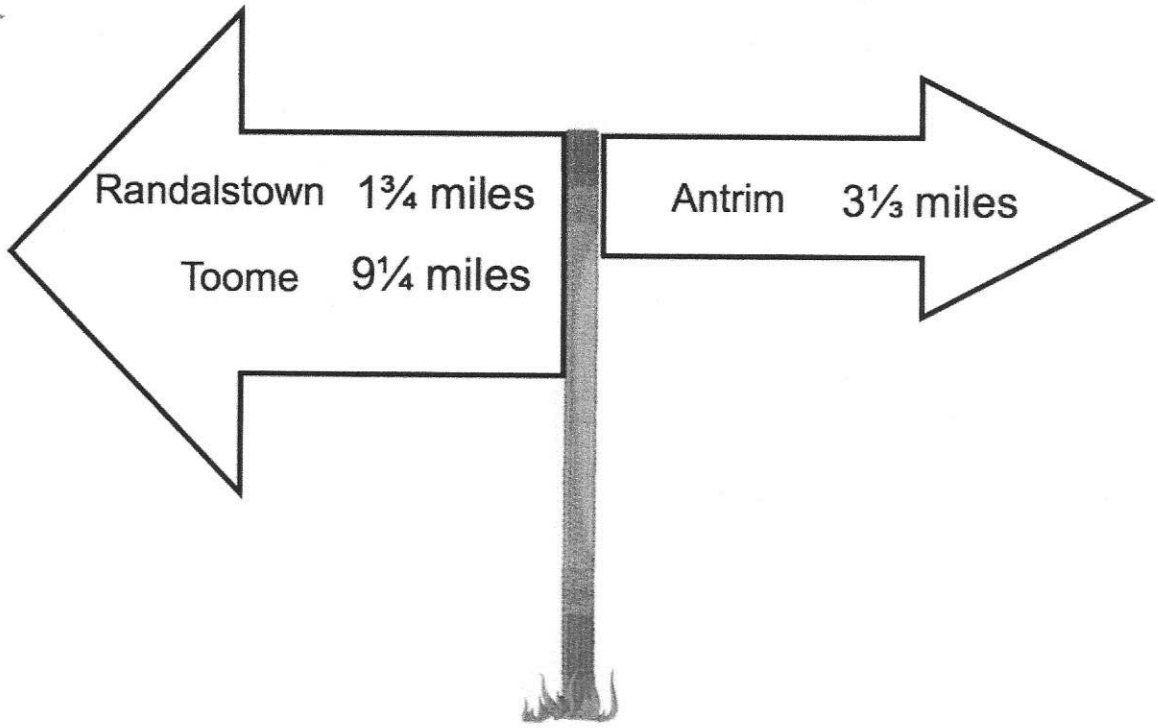
$\frac{7}{10} - \frac{2}{9}$

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

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

(3)

21. Martin is walking from Antrim to Randalstown.



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

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

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

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

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

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

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

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

$\frac{15}{2}$

$7\frac{1}{2}$ .....miles
(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?

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

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

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

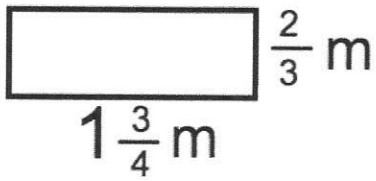
$\frac{32}{12} - \frac{15}{12} = \frac{17}{12}$

$1\frac{5}{12}$

.....cups

(3)

23. Jessica wants to attach ribbon around her wardrobe.



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)