Year 7 adding and subtracting fractions worksheet

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Name: _____ Date: _____

Question 1

Calculate ⅔ + ¾.

Answer: _____

Question 2

A rope is 5 metres long. Jack cuts off 1¾ m and then cuts off another 2⅓ m. How much rope is left?

Answer: _____

Question 3

Mia spent ¾ of an hour on homework on Friday, 1½ hours on Saturday and 2⅔ hours on Sunday.

(a) How many hours did she spend in total? Give your answer as a mixed numeral.

(b) Write the total in hours and minutes.

Answer: _____

Question 4

Calculate 5⅙ - 2¾. Give your answer as a mixed numeral.

Answer: _____

Question 5

Calculate ⅜ + 5/12.

Answer: _____

Question 6

Calculate, giving each answer as a mixed number.

(a) 2½ + 1⅔

(b) 4¼ - 1⅚

Answer: _____

Question 7

Jai walks 1⅔ km to the park, then ¾ km to the shops, then 2½ km home. How far does he walk altogether? Give your answer as a mixed numeral.

Answer: _____

Question 8

Ella spends ¼ of her pocket money on a movie ticket and ⅓ of it on food.

(a) What fraction of her pocket money is left?

(b) If her pocket money was $36, how much does she have left?

Answer: _____

Question 9

Calculate, giving each answer in simplest form.

(a) ⅕ + ⅖

(b) ⅞ - ⅜

(c) ⅓ + ⅙

Answer: _____

Question 10

Find the missing number in each statement.

(a) ⅜ + □ = 1¼

(b) □ × ⅔ = 4/9

Answer: _____

Year 7 adding and subtracting fractions: answers and worked solutions

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Question 1

Key idea: To add fractions with different denominators, first find a common denominator, then add the numerators.

1. Find the lowest common denominator (LCD) of 3 and 4: LCD = 12 2. Rewrite each fraction with denominator 12:\ ⅔ = 8/12, ¾ = 9/12 3. Add the numerators:\ 8/12 + 9/12 = 17/12 4. Convert to a mixed number:\ 17/12 = 15/12

Answer: 15/12

Question 2

Key idea: Subtract both pieces from the original length using a common denominator.

1. Write everything as improper fractions: 5 = 5/1, 1¾ = 7/4, 2⅓ = 7/3 2. Lowest common denominator is 12: 5 = 60/12, 7/4 = 21/12, 7/3 = 28/12 3. 60/12 - 21/12 - 28/12 = 11/12

Answer: 11/12 m of rope is left

Question 3

Key idea: Convert mixed numerals to improper fractions, use a common denominator, then add.

1. (a) 1½ = 3/2 and 2⅔ = 8/3 2. (a) The lowest common denominator of 4, 2, 3 is 12:\ ¾ + 3/2 + 8/3 = 9/12 + 18/12 + 32/12 = 59/12 3. (a) 59 ÷ 12 = 4 remainder 11, so 411/12 hours 4. (b) 11/12 of 60 minutes = 11 × 5 = 55 minutes

Answer: (a) 411/12 hours (b) 4 hours 55 minutes

Question 4

Key idea: Change to improper fractions with a common denominator.

1. 5⅙ = 62/12 and 2¾ = 33/12 2. 62/12 - 33/12 = 29/12 = 25/12

Answer: 25/12

Question 5

Key idea: Use the lowest common denominator, 24.

1. ⅜ = 9/24 and 5/12 = 10/24 2. 9/24 + 10/24 = 19/24

Answer: 19/24

Question 6

Answer: (a) 4⅙ (b) 25/12 (51/12 - 22/12)

Question 7

Key idea: Write each distance as a fraction with denominator 12.

1. 1⅔ = 20/12, ¾ = 9/12, 2½ = 30/12 2. (20 + 9 + 30)/(12) = 59/12 3. 59/12 = 411/12 km

Answer: 411/12 km

Question 8

Answer: (a) 5/12 (b) $15

Question 9

Answer: (a) ⅗ (b) ½ (c) ½

Question 10

Answer: (a) ⅞ (b) ⅔