UNIT 9 Fractions and Percentages

Revision Test 9.1

(Standard)

1. Calculate:

(a)
$$\frac{3}{11} + \frac{7}{11}$$

(b)
$$\frac{1}{4} + \frac{1}{2}$$

(c)
$$\frac{3}{5} + \frac{7}{10}$$

(d)
$$\frac{1}{3} + \frac{1}{4}$$

(8 marks)

2. Calculate:

(a)
$$\frac{1}{2}$$
 of 84

(b)
$$\frac{3}{4}$$
 of 32

(4 marks)

3. Write the following percentages as fractions in their simplest form:

- (a) 50%
- (b) 40%
- (c) 15%

(6 marks)

4. Write the following fractions as percentages:

(a)
$$\frac{1}{4}$$

(b)
$$\frac{7}{10}$$

(4 marks)

5. Calculate:

- (a) 30% of £200,
- (b) 25% of £70.

(4 marks)

6. Add 20% to £40.

(2 marks)

7. Add 30% to £50.

(2 marks)

UNIT 9 Fractions and Percentages

Revision Test 9.2

(Academic)

1. Calculate:

(a)
$$\frac{1}{2} + \frac{1}{3}$$
 (b) $\frac{3}{4} \times \frac{2}{7}$ (c) $\frac{3}{5} \div \frac{1}{2}$

(b)
$$\frac{3}{4} \times \frac{2}{7}$$

$$(c) \quad \frac{3}{5} \div \frac{1}{2}$$

(6 marks)

2. Calculate:

(a)
$$\frac{3}{5}$$
 of 70

(b)
$$\frac{5}{7}$$
 of 28.

(4 marks)

3. Write the following percentages as fractions in their simplest form:

(4 marks)

4. Write the following fractions as percentages:

(a)
$$\frac{7}{20}$$

(b)
$$\frac{2}{25}$$

(4 marks)

5. Calculate:

- 35% of £20, (a)
- 6% of £820. (b)

(4 marks)

6. Add 40% to £50.

(2 marks)

In a sale, prices are reduced by 30%. Calculate the sale price of a 7. pair of boots that normally costs £70.

(3 marks)

The price of a computer is £800. Add $17\frac{1}{2}\%$ VAT to this price. 8.

(3 marks)

UNIT 9 Fractions and Percentages

Revision Test 9.3

(Express)

1. Calculate:

(a)
$$\frac{3}{5} + \frac{4}{7}$$

(b)
$$\frac{3}{8} \times 1^{\frac{2}{7}}$$

(a)
$$\frac{3}{5} + \frac{4}{7}$$
 (b) $\frac{3}{8} \times 1\frac{2}{7}$ (c) $3\frac{1}{2} \div \frac{2}{5}$

(6 marks)

2. Calculate:

(a)
$$\frac{3}{5}$$
 of £48,

(b)
$$\frac{7}{8}$$
 of 96.

(4 marks)

Write $\frac{3}{20}$ as a percentage. 3.

(2 marks)

4. Write 92% as a fraction in its simplest form.

(2 marks)

5. Calculate:

26% of £400,

33% of £40.

(4 marks)

6. Add 35% to £60.

(2 marks)

7. A TV costs £350. In a sale, its price is reduced by 40%. What is the sale price of the TV?

(3 marks)

Add $17\frac{1}{2}\%$ VAT to the price of a cooker, that costs £420 before VAT is added.

(3 marks)

9. In a sale, the price of a book is reduced by 20% to £11.60. What was the original price of the book?

(2 marks)

10. John's salary is increased by 2% to £24 480. What was his original salary?

(2 marks)

Revision Test 9.1 (Standard)

Answers

1. (a)
$$\frac{10}{11}$$

(b)
$$\frac{3}{4}$$

(c)
$$\frac{13}{10} = 1\frac{3}{10}$$

(d)
$$\frac{7}{12}$$

3. (a)
$$\frac{1}{2}$$

(b)
$$\frac{2}{5}$$

(c)
$$\frac{3}{20}$$

(8 *marks*)

(TOTAL MARKS 30)

Revision Test 9.2 (Academic)

Answers

1. (a)
$$\frac{5}{6}$$

(b)
$$\frac{3}{14}$$

(c)
$$\frac{6}{5} = 1\frac{1}{5}$$

3. (a)
$$\frac{9}{10}$$

(b)
$$\frac{7}{25}$$

7. £70 ×
$$\frac{70}{100}$$
 = £49

8.
$$£800 \times \frac{117.5}{100} = £940$$

(TOTAL MARKS 30)

Revision Test 9.3 (Express)

Answers

1. (a)
$$\frac{41}{35} = 1\frac{6}{35}$$

(b)
$$\frac{27}{56}$$

(c)
$$8\frac{3}{4}$$

4.
$$\frac{23}{25}$$

6.
$$£60 \times \frac{135}{100} = £81$$

7.
$$£350 \times \frac{60}{100} = £210$$

8.
$$£420 \times \frac{117.5}{100} = £493.50$$

9. £11.60
$$\times \frac{100}{80}$$
 = £14.50

10. £24480 ×
$$\frac{100}{98}$$
 = £24000

(2 marks)

(TOTAL MARKS 30)