1 Ahmed employs three people, Budi, Citra and Dian.
Budi earns \$17 000, Citra earns \$13 600 and Dian earns \$6800.

Find the ratio of their earnings in its simplest form.

Budi : Citra : Dian = ... : .... : .... [2]

[Total: 2]

2 Share \$608 in the ratio 4 : 5 : 7.

\$ ....

\$ ....

\$ .... [3]

[Total: 3]

3 Write 6538 correct to the nearest ten.

.... [1]

[Total: 1]

4 Calculate.

$$\frac{6.4 \times 4^2}{17.9 - 6.1}$$

Give your answer correct to 3 decimal places.

.... [2]

[Total: 2]

5 By writing each number correct to 1 significant figure, find an estimate for the value of

$$\frac{2.8 \times 82.6}{27.8 - 13.9}.$$

.... [2]

[Total: 2]

6 Adam changes $700 into euros at a bank.
The exchange rate is $1 = 0.904 euros.

Work out the amount Adam receives.

.... euros [1]

[Total: 1]

7 Ahmed buys materials from China costing 7560 yuan.

Work out the cost of the materials in dollars when the exchange rate is $1 = 7.06 yuan.
Give your answer correct to the nearest dollar.

$ .... [2]

[Total: 2]

8   The cost of a flight is \$920.
The exchange rate is \$1 = 6.87 Chinese yuan.

Find the cost of the flight in yuan.

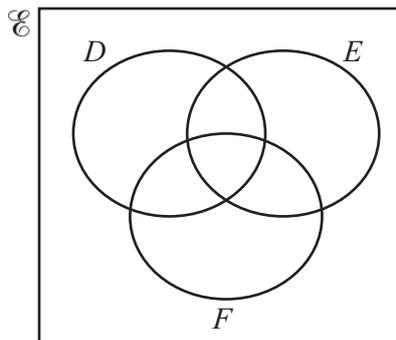.. yuan   [1]

[Total: 1]

9   Alex changes 190 euros (€) into pounds (£) when £1 = €1.1723 .

Calculate the amount Alex receives.
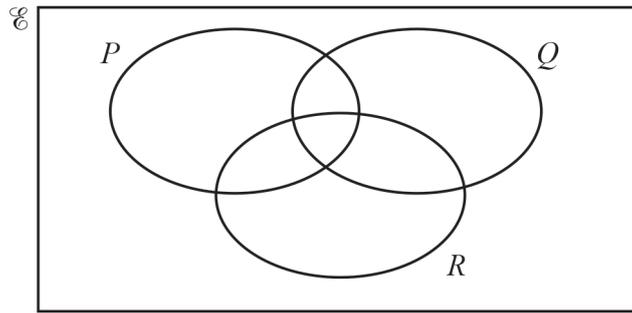Give your answer correct to 2 decimal places.

£ ....   [2]

[Total: 2]

10   Shade the region $D' \cup (E \cap F)'$.
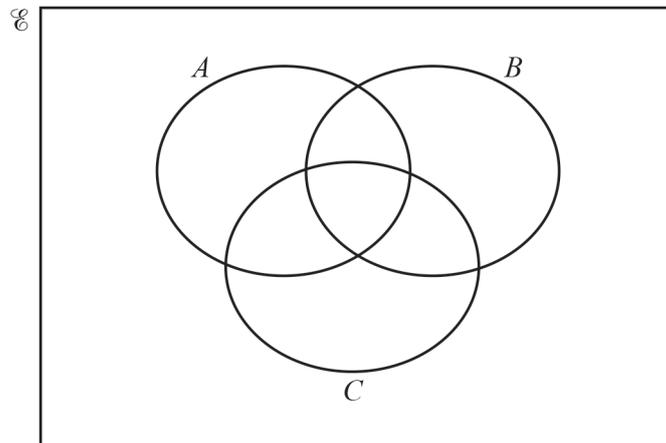

[1]

[Total: 1]

11 Shade the region $P \cup (Q \cap R)'$.

[1]

[Total: 1]

12 In this Venn diagram, shade the region $(A \cup B') \cap C$.

[1]

[Total: 1]

13 Carlos invests \$4540 at a rate of $r\%$ per year compound interest.
At the end of 10 years he has earned \$1328.54 in interest.

Calculate the value of r.

$r = $ .... [3]

[Total: 3]

14 The price of a coat is \$126.
In a sale, this price is reduced by 18%.

Find the sale price of the coat.

\$ .... [2]

[Total: 2]

15 Lin invests \$16 000 at a rate of r % per year simple interest.
At the end of 5 years, she has a total amount of \$17 920.

Find the value of r.

$r = $ .... [3]

[Total: 3]

16 268 of the 604 passengers on a plane are women.

Find the percentage of the passengers that are women.

.... % [1]

[Total: 1]

17 Clara invests $8500 for 4 years at a rate of 1.7% per year simple interest.

Calculate the total interest earned during the 4 years.

$ .... [2]

[Total: 2]

18 Antonio buys beach balls for $2.50 each and sells them for $4.20 each.

Work out the percentage profit he makes on each beach ball.

.... % [2]

[Total: 2]

19 Work out.
$$\left(\frac{125}{27}\right)^{-\frac{2}{3}}$$

.... [1]

[Total: 1]

20 Find the exact value of $8^{\frac{2}{3}} \times 49^{-\frac{1}{2}}$.

.... [2]

[Total: 2]

21
$$2^p = \frac{1}{8^4}$$

Find the value of p.

$p =$ .... [2]

[Total: 2]