Fractions, Decimals & Percentages: Medium Practice Paper 6 Answers

Q#	Answer	Explanation
1	C	The row must show one value three ways. The percentage is 60%, and a percentage is turned into a decimal by dividing by 100, so 60 ÷ 100 = 0.6. Checking the fraction: 3 ÷ 5 = 0.6 as well.
2	A	The decimal column makes the comparison easy. The four values are 0.5, 0.25, 0.6 and 0.7, and in order smallest first those are 0.25, 0.5, 0.6, 0.7. That matches 1/4, 1/2, 3/5, 7/10.
3	E	Write them all as decimals to compare fairly. They come to 0.605, 0.6, 0.61, 0.62 and 5 ÷ 8 = 0.625. The largest is 0.625, so 5/8 wins.
4	A	75% is the same as the fraction 3/4. Finding three quarters means splitting the number into 4 equal parts and taking 3 of them, so you divide by 4 and then multiply by 3.
5	B	Dividing 1 by 3 gives 0.3333..., which never stops. Of the five choices, 0.33 is only about 0.003 below it, while 0.34 is about 0.007 above and 0.3 is about 0.033 below, so 0.33 is nearest.
6	A	A percentage means so many hundredths, so 35% is 35/100. Both numbers divide by 5, giving 35 ÷ 5 = 7 on top and 100 ÷ 5 = 20 underneath, so the answer is 7/20.
7	C	Turn the fraction into a decimal first: 3 ÷ 8 = 0.375. Then multiply by 100 to make it a percentage, which gives 37.5%.
8	A	Compare the first figure after the decimal point. Four of the numbers have 3 or 4 tenths, but 0.099 has none, so it is smaller than all of them. Having more digits does not make a decimal bigger.
9	C	Change the length into centimetres first, since 2 metres is 200 cm. A quarter of that is 200 ÷ 4 = 50 cm, so three quarters is 50 × 3 = 150 cm.
10	C	The largest number that divides into both 36 and 48 is 12. Dividing gives 36 ÷ 12 = 3 on top and 48 ÷ 12 = 4 underneath, so the fraction is 3/4.

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11	B	Find 10% first by dividing by 10: 60 ÷ 10 = 6 pounds. Half of that is 5%, which is 3 pounds. Adding them gives 6 + 3 = 9 pounds.
12	B	Work each one out as a decimal. 1/6 is about 0.167, 3/5 is 3 ÷ 5 = 0.6, 6% is 0.06, 0.66 is already a decimal and 5/6 is about 0.833. Only 3/5 comes to 0.6.
13	D	The maths bar reaches 30, so 30% of the pupils chose maths. As a fraction that is 30/100, and dividing both numbers by 10 gives 3/10.
14	B	0.25 is the same as a quarter, so this is asking for a quarter of 8. That is 8 ÷ 4 = 2.
15	D	One eighth of the class is 32 ÷ 8 = 4 pupils, so the boys number 4 × 3 = 12. The girls are everyone else, which is 32 − 12 = 20.

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