

Approach: Independent

Year: 8

Focus: Understanding number and number operations

Resources: Answer booklet



Questions / instructions:

Add one hundred

1. 700 800
 2. 15 735 15 835
 3. 23 940 24 040

Multiply by one hundred

4. 12 1200
 5. 316 31 600
 6. 5.3 530

7. Which number best describes the amount of the box shaded?

- A 0.02
☒ B 0.12
 C 0.30
 D 0.32
 E 0.52

B



Estimate the decimal shown by the arrow on the number line. 0.5
0.45 - 0.55 (exclud. 0.5)

9. The number that is 4 less than 34,000 is ... 33 996

10. Without working them out, which is the greatest number?

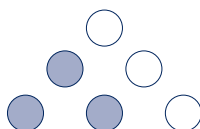
- A $29 + 0.8$
 B 29×0.8
☒ C $29 \div 0.8$
 D $29 - 0.8$

× B
 ✓ C

11. How much is shaded?

- ☒ A $\frac{1}{2}$
 B $\frac{2}{6}$
 C $\frac{4}{6}$
 D $\frac{4}{2}$

A



12. Without working out answers, choose the answer that represents the larger amount.

- A 145×4
☒ B $144 + 146 + 148 + 150$
 C $140 + 142 + 144 + 150$
 D $140 + 142 + 148 + 150$

B

% response
2005 ('01)

year 8

94 (97)
 92 (88)
 77 (73)

62 (66)
 53 (57)
 34 (29)

58 (51)

60 (57)
 5 (7)

65 (58)

[68 (77)]
 7 (5)

86 (84)

67 (70)

13. The chart shows...



- A $\frac{2}{3}$ of the days are rainy
 B $\frac{1}{2}$ of the days are rainy
 C $\frac{3}{5}$ of the days are rainy
☒ D $\frac{2}{5}$ of the days are rainy

D

14. What is another name for $\frac{15}{4}$?

- A $4\frac{1}{5}$
 B $2\frac{1}{4}$
 C $7\frac{4}{5}$
☒ D $3\frac{3}{4}$

× A

✓ D

15. Write this number as a decimal.

$$4\frac{2}{10}$$

4.2

Total score: 15–16

13–14

11–12

9–10

7–8

5–6

0–4

% response
2005 ('01)

year 8

82 (75)

[31 (38)]

46 (39)

50 (44)

12 (5)

15 (21)

20 (21)

20 (18)

15 (12)

10 (11)

8 (11)

Commentary:

Performance at year 8 level showed substantial improvement over year 4 (see p20), particularly in those questions involving calculation. Modest gains were seen between 2001 and 2005.