

Grade 5 - Dividing by Two-Digit Divisors - Test Answer Key

Common Core 5.NBT.B.6 · maths-pdf.fr/en/

Use this answer key to grade the division test. It shows partial quotients, checks and a scoring guide for each question. The total is 20 points. Accept any correct strategy, such as partial quotients, an area model or the standard long-division algorithm.

Grade 5 · Common Core State Standards: **5.NBT.B.6**

Question 1 - Short quotients [2 pts]

(a) $12 \times 14 = 168$. **14**

(b) $540 \div 9 = 60$. **60**

Scoring: 1 point for each correct quotient.

Question 2 - Divide 1,404 [3 pts]

$26 \times 50 = 1,300$, $1404 - 1300 = 104$.

$26 \times 4 = 104$.

$50 + 4 = 54$.

Answer: **54**

Scoring: 1 point for each correct partial quotient (50 and 4), 1 point for the correct sum. Accept other correct partial quotients such as $40 + 10 + 4$.

Question 3 - Division with a remainder [3 pts]

$47 \times 80 = 3,760$, $3816 - 3760 = 56$. $47 \times 1 = 47$, $56 - 47 = 9$.

Check: $47 \times 81 + 9 = 3,807 + 9 = 3,816$.

Answer: **81 R 9**

$$\begin{array}{r}
 47 \overline{) 3816} \\
 \underline{- 3760} \quad 47 \times 80 \\
 56 \\
 \underline{- 47} \quad 47 \times 1 \\
 9
 \end{array}$$

Quotient: 81 R 9

Solution layout.

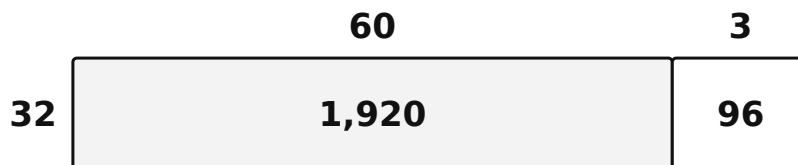
Scoring: 1 point for the partial quotients, 1 point for the quotient 81, 1 point for the remainder 9.

Question 4 - Area model [2 pts]

$$1,920 \div 32 = 60 \text{ and } 96 \div 32 = 3.$$

$$60 + 3 = 63.$$

Answer: **63**



Solution.

Scoring: 1 point for the widths 60 and 3, 1 point for the quotient.

Question 5 - Estimate and solve [2 pts]

$$\text{Estimate: } 2,800 \div 40 = 70 \text{ (or } 3,000 \div 40 = 75).$$

$$\text{Exact: } 42 \times 70 = 2,940, 2982 - 2940 = 42, 42 \times 1 = 42.$$

$$70 + 1 = 71.$$

Answer: **71**

Scoring: 1 point for an estimate from 70 to 75, 1 point for 71.

Question 6 - Diego's work [2 pts]

Diego ignored the zero in 1,260. $18 \times 7 = 126$ is only 126, not 1,260. He needs 7 tens:
 $18 \times 70 = 1,260$.

Answer: **70**

Scoring: 1 point for the explanation, 1 point for 70.

Question 7 - Field trip vans [3 pts]

(a) $15 \times 25 = 375$, $389 - 375 = 14$. **25 R 14**

(b) 14 students are left over and need another van: **26 vans**.

Scoring: (a) 1 point for the quotient 25, 1 point for the remainder 14. (b) 1 point.

Question 8 - Pencil boxes [3 pts]

(a) $36 \times 40 = 1,440$, so $1,440 \div 36 = 40$. **40 pencils**

(b) $40 \div 8 = 5$. **5 pencils**

Scoring: (a) 2 points; 1 point for a correct partial quotient method with an arithmetic slip. (b) 1 point.

Total
20 points