

# DIVISION BY ESTIMATION

# ANSWERS

## HELPFUL EXAMPLES

A.

$$3 \overline{)58} \rightarrow 3 \overline{)60} \rightarrow 3 \times 10 = 60$$

ESTIMATE THE DIVIDEND (INSIDE NUMBER) SO THAT YOU CAN QUICKLY FIND THE QUOTIENT (ANSWER).

WHICH MEANS  
 $58 \div 3$  IS ABOUT 10

B.

40 = 4 TENS  
 360 = 36 TENS

$$42 \overline{)356} \rightarrow 40 \overline{)360} \rightarrow 4 \overline{)36} \overset{9}{}$$

ESTIMATE THE DIVIDEND (INSIDE NUMBER) AND THE DIVISOR (OUTSIDE NUMBER). 42 CHANGES TO 40 AND 356 CHANGES TO 360. IN OTHER WORDS, YOU HAVE 36 TENS DIVIDED BY 4 TENS, WHICH EQUALS 9.

NOW YOUR TURN. DIVIDE USING ESTIMATION. SHOW YOUR ESTIMATIONS.

**\*\*ANSWERS MAY VARY\*\***

4      80

1.  $4 \overline{)82}$   
 $4 \overline{)80} = 20$   
 or  $4 \times 20 = 80$

2.  $2 \overline{)47}$   
 25

3.  $3 \overline{)91}$   
 30

4.  $7 \overline{)74}$   
 10

5.  $5 \overline{)98}$   
 20

6.  $3 \overline{)61}$   
 20

7.  $8 \overline{)79}$   
 10

8.  $5 \overline{)76}$   
 25 OR 26

9.  $4 \overline{)43}$   
 10

10.  $2 \overline{)39}$   
 20

4      400

11.  $4 \overline{)402}$   
 $4 \overline{)400} = 100$   
 or  $4 \times 100 = 400$

12.  $9 \overline{)268}$   
 30

13.  $2 \overline{)603}$   
 300

14.  $5 \overline{)993}$   
 200

15.  $6 \overline{)244}$   
 40

16.  $3 \overline{)151}$   
 50

17.  $2 \overline{)396}$   
 200

18.  $7 \overline{)137}$   
 20

19.  $4 \overline{)362}$   
 90

20.  $8 \overline{)475}$   
 60

80      640

21.  $78 \overline{)638}$   
 HIDE THE ZEROS.  
 $8 \overline{)64} = 8$   
 or  $80 \times 8 = 640$

22.  $31 \overline{)273}$   
 9

23.  $52 \overline{)245}$   
 5

24.  $67 \overline{)416}$   
 6

25.  $19 \overline{)142}$   
 7

26.  $83 \overline{)317}$   
 4

27.  $99 \overline{)804}$   
 8

28.  $64 \overline{)358}$   
 6

29.  $12 \overline{)303}$   
 30

30.  $35 \overline{)436}$   
 11