1) a) $960 ÷ 30 = 960 ÷ 10 ÷ 3$ $960 ÷ 30 =$ **32**

b) $240 ÷ 60 = 240 ÷$ **10** $÷ 6$ $240 ÷ 60 =$ **4**

c) $90 ÷ 6 = 90 ÷ 3 ÷$ **2** $90 ÷ 6 =$ **15**

d) $375 ÷ 15 = 375 ÷ 5 ÷$ **3** $375 ÷ 15 =$ **25**

e) $288 ÷ 18 = 288 ÷ 9 ÷$ **2** $288 ÷ 18 =$ **16**

2) a) $512 ÷ 16 =$ **32**   *$512 ÷ 8 = 64, 64 ÷ 2 = 32$, or $512 ÷ 4 = 128, 128 ÷ 4 = 32$*

b) $336 ÷ 12 =$ **28**   *$336 ÷ 4 = 84, 84 ÷ 3 = 28$, or $336 ÷ 6 = 56, 56 ÷ 2 = 28$*

c) $945 ÷ 21 =$ **45**   *$945 ÷ 7 = 135, 135 ÷ 3 = 45$*

d) $1350 ÷ 45 =$ **30**   *$1350 ÷ 9 = 150, 150 ÷ 5 = 30$, or $1350 ÷ 15 = 90, 90 ÷ 3 = 30$*

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1) Amna has partitioned 42 instead of finding its factors so her method will not give the correct answers.

Accept any explanation that explains that Hardeep's method would not be efficient because these factors will not make the calculation any easier. You would still need to divide 1848 by 42.

$1848 ÷ 21 = 88, 88 ÷ 2 = 44$

$1848 ÷ 14 = 132, 132 ÷ 3 = 44$

$1848 ÷ 7 = 264, 264 ÷ 6 = 44$

2) *Accept an explanation that explains that this is correct. If you divide using each factor in turn, you will get the correct answer. Accept an explanation that shows that this method is not always efficient, for example, if the divisor is a prime number and has factors of itself and one, using these factors to find the answer would not be a helpful method.*

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1) *Accept any two of the following solutions:*

$1680 ÷ 24 = 70, 70 ÷ 2 = 35$

$1680 ÷ 16 = 105, 105 ÷ 3 = 35$

$1680 ÷ 12 = 140, 140 ÷ 4 = 35$

$1680 ÷ 8 = 210, 210 ÷ 6 = 35$

2) a) *2, 4, 6, 8, 12*

b) *C possibilities multiplied by 9: $2 × 9 = 18, 4 × 9 = 36, 6 × 9 = 54, 8 × 9 = 72, 12 × 9 = 108$*

c) *Using the factor pairs, calculate all the possible values of B. on the horizontal version insert large box*

$432 ÷ 9 = 48, 48 ÷ 2 = 24$

$432 ÷ 9 = 48, 48 ÷ 4 = 12$

$432 ÷ 9 = 48, 48 ÷ 6 = 8$

$432 ÷ 9 = 48, 48 ÷ 8 = 6$

$432 ÷ 9 = 48, 48 ÷ 12 = 4$