1)

a)

7 × 8
7 × 4 = **28**
28 + **28** = **56**

b)

7 × 8
7 × 5 = **35**
7 × 3 = **21**
35 + **21** = **56**

c)

7 × 12
7 × 6 = **42**
42 + **42** = **84**

d)

7 × 12
7 × 10 = **70**
7 × 2 = **14**
70 + **14** = **84**

2) Answers may vary. For example:

a) 8 × 6

8 × 3 = 24
double 24 = 48

8 × 5 = 40
8 × 1 = 8
40 + 8 = 48

b) 6 × 9

6 × 10 = 60
6 × 1 = 6
60 – 6 = 54

6 × 5 = 30
6 × 4 = 24
30 + 24 = 54

c) 9 × 8

9 × 4 = 36
double 36 = 72

9 × 10 = 90
9 × 2 = 18
90 – 18 = 72

d) 6 × 12

6 × 6 = 36
double 36 = 72

6 × 10 = 60
6 × 2 = 12
60 + 12 = 72

3)

a)

A 12 × 8 = 12 × 4 × **2**
B 9 × 4 = 9 × 2 × **2**
C 14 × 5 = 14 × 10 ÷ **2**
D 9 × 4 = 20 × 4 – **1** × 4

b)

A 96
B 36
C 70
D 76

1)

a) Elias has incorrectly multiplied the tens digit in 46 by 8 as if it was ones instead of tens.

b) 40 × 8 + 6 × 8 = 320 + 48 = 368

2)

a) Answers should disagree with Priya's statement as multiplying by 8 and dividing by 2 would be a difficult calculation to complete. Multiplication with addition or subtraction would be a more efficient method.

b) 60 × 4 – 3 × 4 = 240 – 12 = 228 or 50 × 4 + 7 × 4 = 200 + 28 = 228

3) Answers may vary depending on chosen method. For example:
Bartek's method is efficient because it is easy to multiply by 10 and divide by 2.
Emily's method is efficient because it uses partitioning and multiplying by known facts (× 5).

1) Priya: 26 × 6 = 156

Bartek: 35 × 6 = 210

Elias: 46 × 6 = 276

2)

a) 56 × 10 ÷ 2 = 280

b) 7 × 8 × 5 = 280

c) 30 × 10 – 20 = 280

3)

a)
20 × 5 = 100
4 × 5 = 20
100 + 20 = 120

b)
25 × 5 = 125
1 × 5 = 5
125 – 5 = 120

c)
24 × 10 = 240
240 ÷ 2 = 120