

Common Multiples and the LCM

Workout

Question 1:

- (a) 2, 4, 6, 8, 10, 12, 14, 16, 18, 20 (b) 3, 6, 9, 12, 15, 18, 21, 24, 27, 30
(c) 6, 12, 18

Question 2:

- (a) 4, 8, 12, 16, 20, 24, 28, 32, 36, 40 (b) 5, 10, 15, 20, 25, 30, 35, 40, 45, 50
(c) 20, 40, 60

Question 3:

- (a) 10, 20, 30 (b) 12, 24, 36 (c) 12, 24, 36 (d) 30, 60, 90
(e) 60, 120, 180 (f) 15, 30, 45 (g) 18, 36, 54 (h) 12, 24, 36

Question 4:

- (a) 5, 10, 15, 20, 25, 30, 35, 40, 45, 50 (b) 8, 16, 24, 32, 40, 48, 56, 64, 72, 80
(c) 40

Question 5:

- (a) 6, 12, 18, 24, 30, 36, 42, 48, 54, 60 (b) 8, 16, 24, 32, 40, 48, 56, 64, 72, 80
(c) 24

Question 6:

- (a) 30 (b) 14 (c) 24 (d) 20
(e) 36 (f) 42 (g) 24 (h) 36
(i) 120 (j) 60 (k) 52 (l) 18
(m) 175 (n) 66 (o) 48 (p) 140

Question 7:

- (a) 30 (b) 60 (c) 70 (d) 90
(e) 60 (f) 60 (g) 60

Apply

Question 1: 24

Question 2: (a) 8:36 am (b) 6 times (including 8am and 11am)

Question 3: 4, 15

Question 4: 7, 10

Question 5: 210 seconds

Question 6: By multiplying two numbers together we find a common multiple, but it isn't necessarily the lowest common multiple. E.g. $4 \times 6 = 24$ but the lowest common multiple of 4 and 6 is 12.

Question 7: 90 each

Question 8: For example,

$2 \times 3 = 6$ and LCM of 2 and 3 is 6.

$12 \times 13 = 156$ and the LCM of 12 and 13 is 156.

$25 \times 26 = 650$ and the LCM of 25 and 26 is 650.

$8 \times 9 = 72$ and the LCM of 8 and 9 is 72.

From my findings, her theory is true.