Name: _____ Date: _____

Fresh Math

Multiplication Rule: Independent Events - Medium

The events are independent. Use P(A and B) = P(A) · P(B). Write the answer as a decimal.

1. 60% of phones have a scratch and 40% have a dead pixel, independently. Find P(a phone has both).

2. A machine makes a defective part 35% of the time. A second machine makes one 20% of the time. Find P(both parts are defective).

3. 65% of phones have a scratch and 25% have a dead pixel, independently. Find P(a phone has both).

4. A bus is late 85% of the time and a train is late 80% of the time. Find P(both are late).

5. A bus is late 70% of the time and a train is late 15% of the time. Find P(both are late).

6. The chance of rain on Saturday is 35% and on Sunday is 35%. Find P(it rains both days).

Name: _____ Date: _____

Fresh Math

Multiplication Rule: Independent Events - Medium

The events are independent. Use P(A and B) = P(A) · P(B). Write the answer as a decimal.

7. The chance of rain on Saturday is 35% and on Sunday is 40%. Find P(it rains both days).

8. 10% of phones have a scratch and 60% have a dead pixel, independently. Find P(a phone has both).

9. A machine makes a defective part 60% of the time. A second machine makes one 60% of the time. Find P(both parts are defective).

10. A machine makes a defective part 10% of the time. A second machine makes one 15% of the time. Find P(both parts are defective).

11. 30% of phones have a scratch and 45% have a dead pixel, independently. Find P(a phone has both).

12. 85% of phones have a scratch and 75% have a dead pixel, independently. Find P(a phone has both).

Name: _____ Date: _____

Multiplication Rule: Independent Events - Medium

The events are independent. Use P(A and B) = P(A) · P(B). Write the answer as a decimal.

13. Mia makes 75% of her free throws and Jo makes 85% of theirs. Find P(both make their next shot).

14. The chance of rain on Saturday is 65% and on Sunday is 65%. Find P(it rains both days).

15. A bus is late 55% of the time and a train is late 65% of the time. Find P(both are late).

16. A machine makes a defective part 85% of the time. A second machine makes one 70% of the time. Find P(both parts are defective).

Multiplication Rule: Independent Events - Medium - Answer Key

1. 60% of phones have a scratch and 40% have a dead pixel, independently. Find P(a phone has both).

   0.24

2. A machine makes a defective part 35% of the time. A second machine makes one 20% of the time. Find P(both parts are defective).

   0.07

3. 65% of phones have a scratch and 25% have a dead pixel, independently. Find P(a phone has both).

   0.1625

4. A bus is late 85% of the time and a train is late 80% of the time. Find P(both are late).

   0.68

5. A bus is late 70% of the time and a train is late 15% of the time. Find P(both are late).

   0.105

6. The chance of rain on Saturday is 35% and on Sunday is 35%. Find P(it rains both days).

   0.1225

Multiplication Rule: Independent Events - Medium - Answer Key

7. The chance of rain on Saturday is 35% and on Sunday is 40%. Find P(it rains both days).

   0.14

8. 10% of phones have a scratch and 60% have a dead pixel, independently. Find P(a phone has both).

   0.06

9. A machine makes a defective part 60% of the time. A second machine makes one 60% of the time. Find P(both parts are defective).

   0.36

10. A machine makes a defective part 10% of the time. A second machine makes one 15% of the time. Find P(both parts are defective).

    0.015

11. 30% of phones have a scratch and 45% have a dead pixel, independently. Find P(a phone has both).

    0.135

12. 85% of phones have a scratch and 75% have a dead pixel, independently. Find P(a phone has both).

    0.6375

Multiplication Rule: Independent Events – Medium – Answer Key

13. Mia makes 75% of her free throws and Jo makes 85% of theirs. Find P(both make their next shot).

    0.6375

14. The chance of rain on Saturday is 65% and on Sunday is 65%. Find P(it rains both days).

    0.4225

15. A bus is late 55% of the time and a train is late 65% of the time. Find P(both are late).

    0.3575

16. A machine makes a defective part 85% of the time. A second machine makes one 70% of the time. Find P(both parts are defective).

    0.595