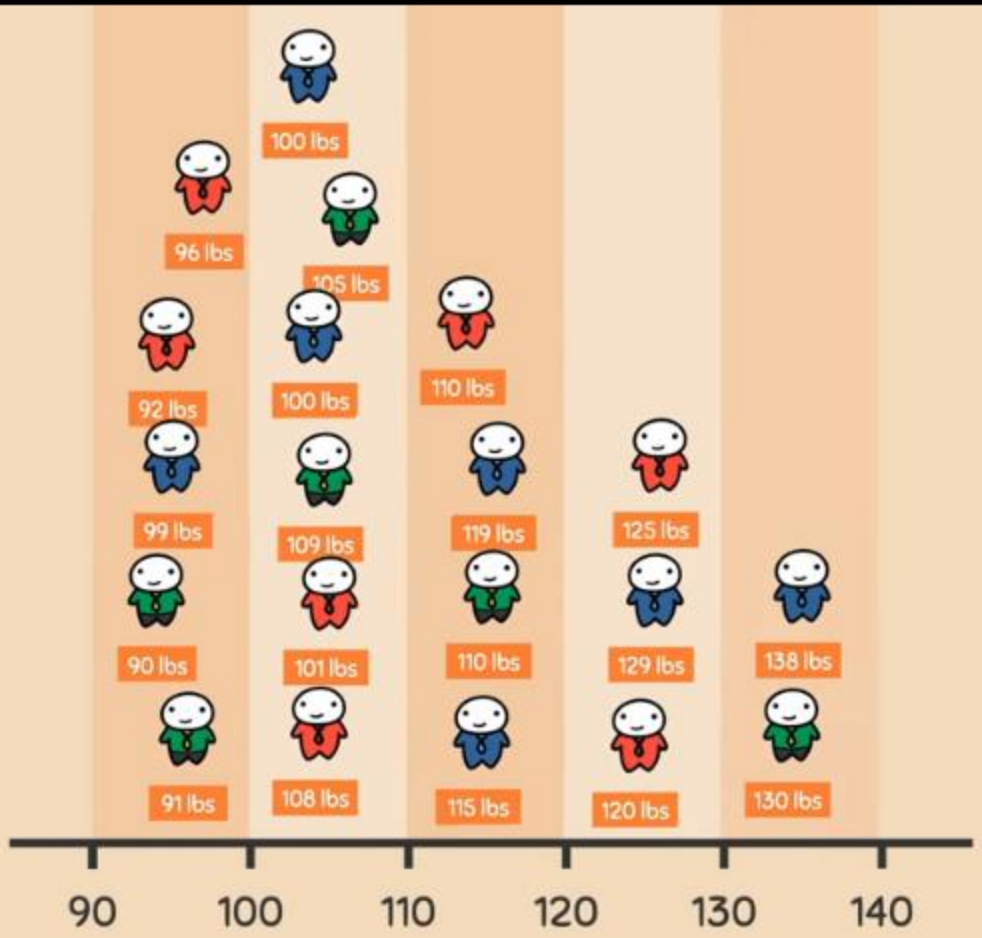
REVIEW

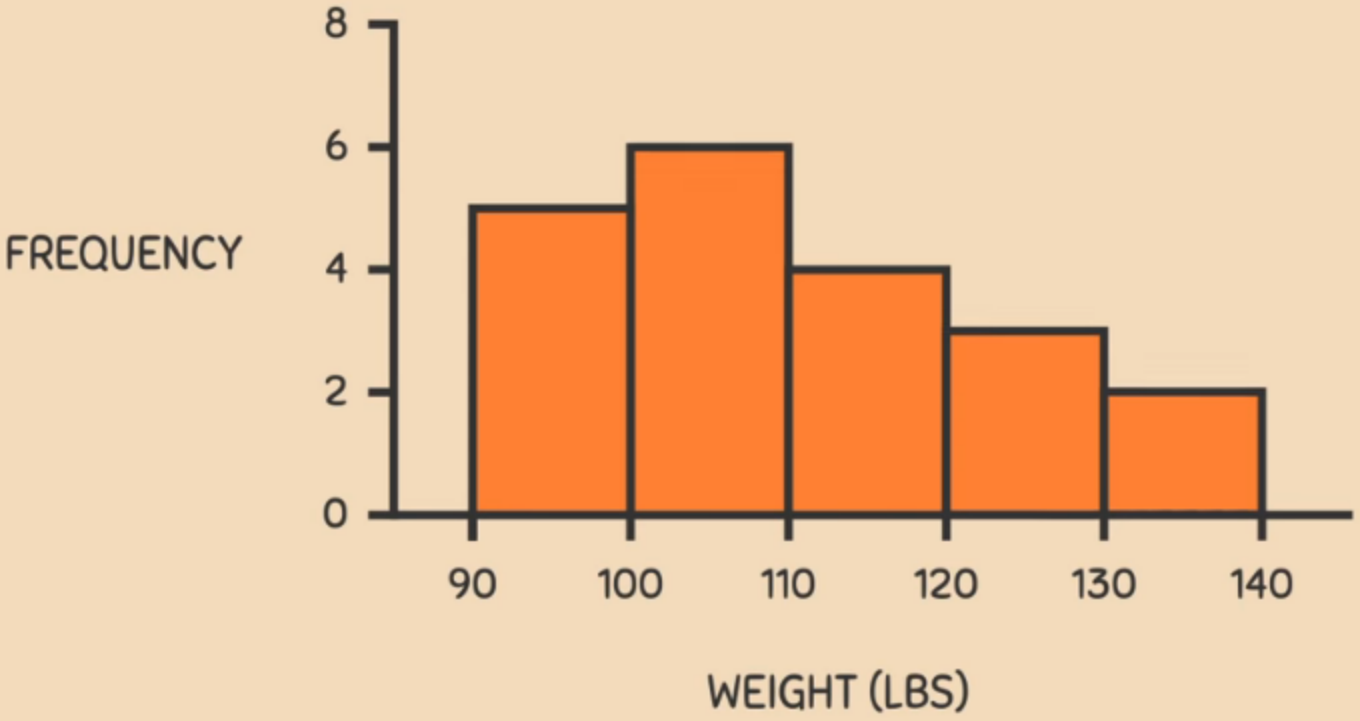

90 lbs
100 lbs
108 lbs
99 lbs
101 lbs
130 lbs
110 lbs
138 lbs
129 lbs
96 lbs


100 lbs
110 lbs
92 lbs
109 lbs
115 lbs
120 lbs
91 lbs
119 lbs
105 lbs
125 lbs

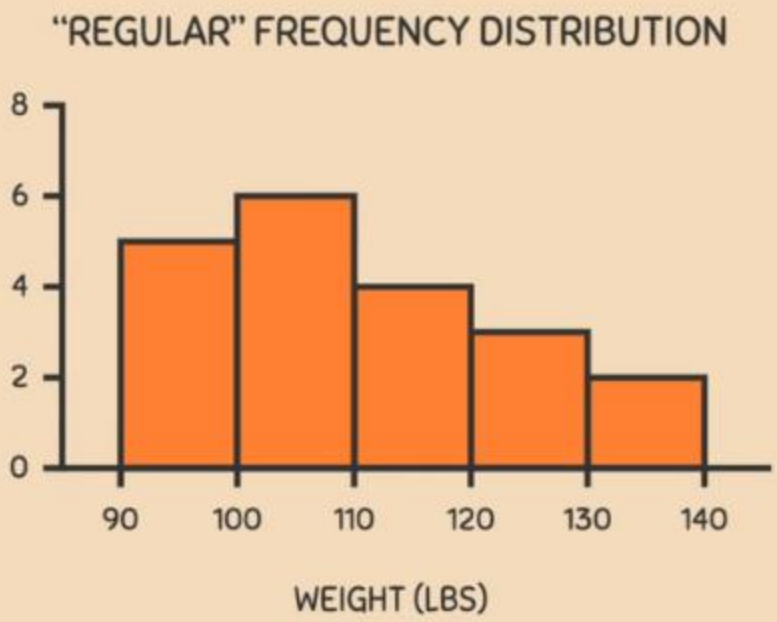
REVIEW

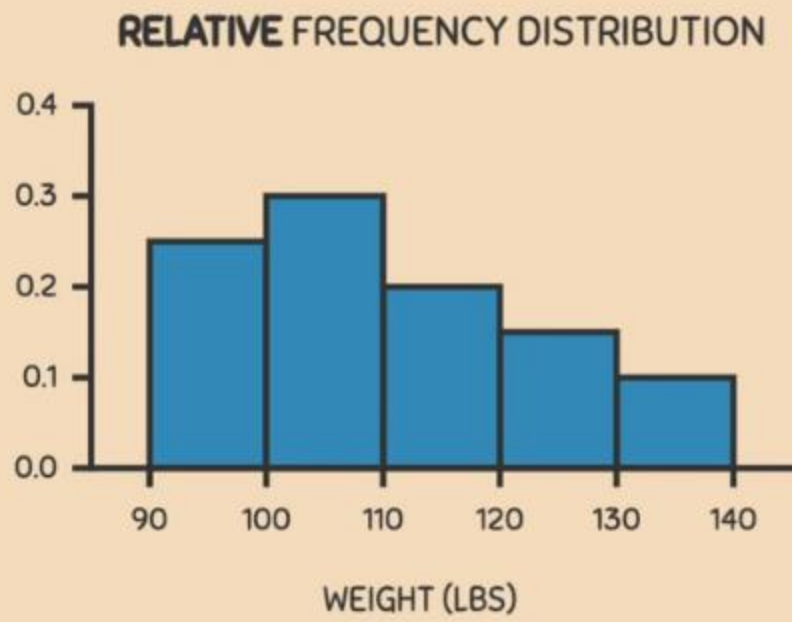

100 lbs
96 lbs
105 lbs
92 lbs
100 lbs
110 lbs
99 lbs
109 lbs
119 lbs
125 lbs
90 lbs
101 lbs
110 lbs
129 lbs
138 lbs
91 lbs
108 lbs
115 lbs
120 lbs
130 lbs
90
100
110
120
130
140

REVIEW

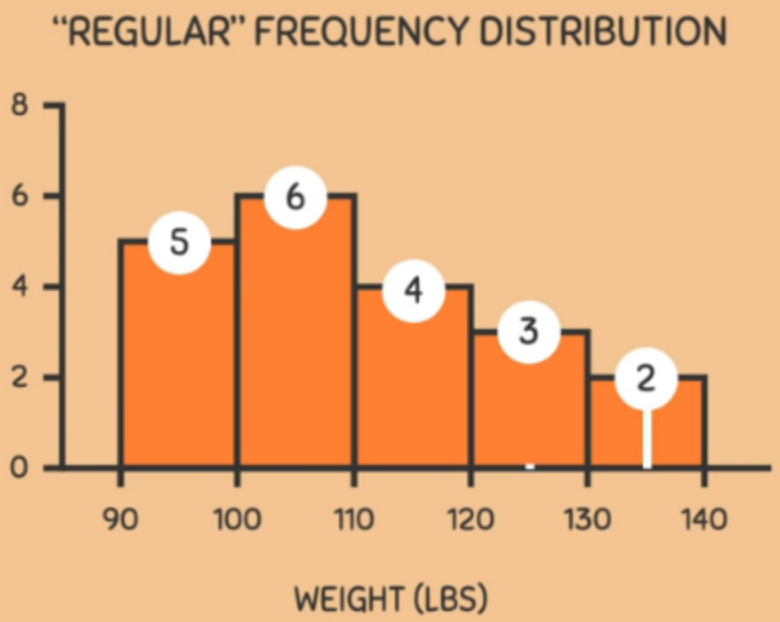


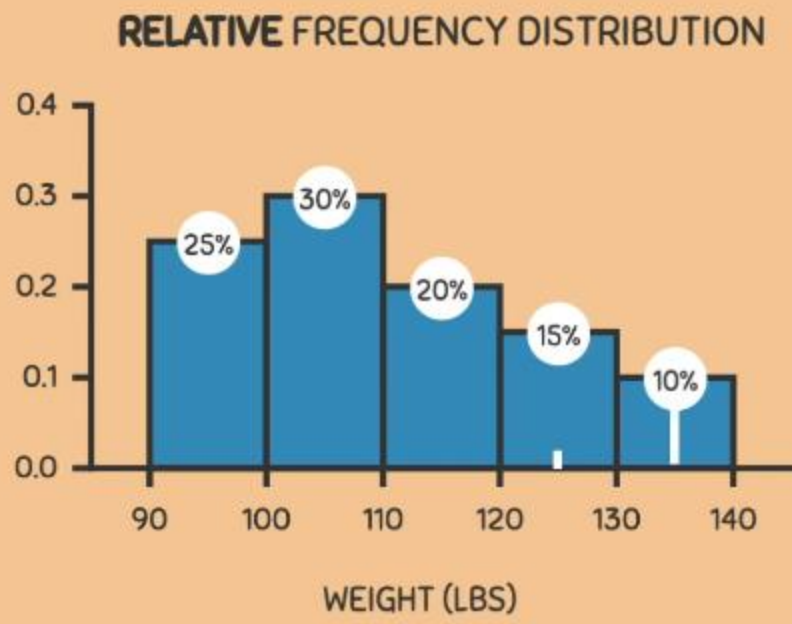
REVIEW


"REGULAR" FREQUENCY DISTRIBUTION
8
6
4
2
0
90
100
110
120
130
140
WEIGHT (LBS)


RELATIVE FREQUENCY DISTRIBUTION
0.4
0.3
0.2
0.1
0.0
90
100
110
120
130
140
WEIGHT (LBS)

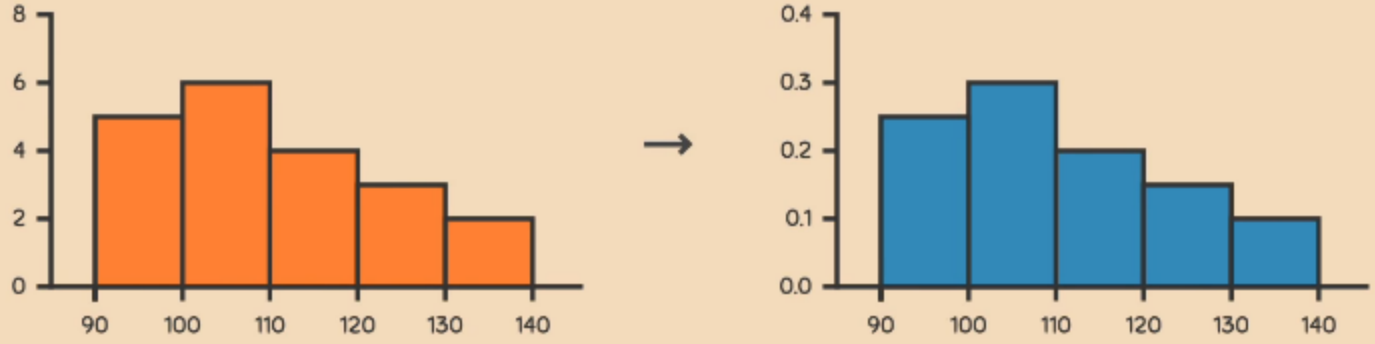
REVIEW


"REGULAR" FREQUENCY DISTRIBUTION
8
6
4
2
0
5
6
4
3
2
90
100
110
120
130
140
WEIGHT (LBS)

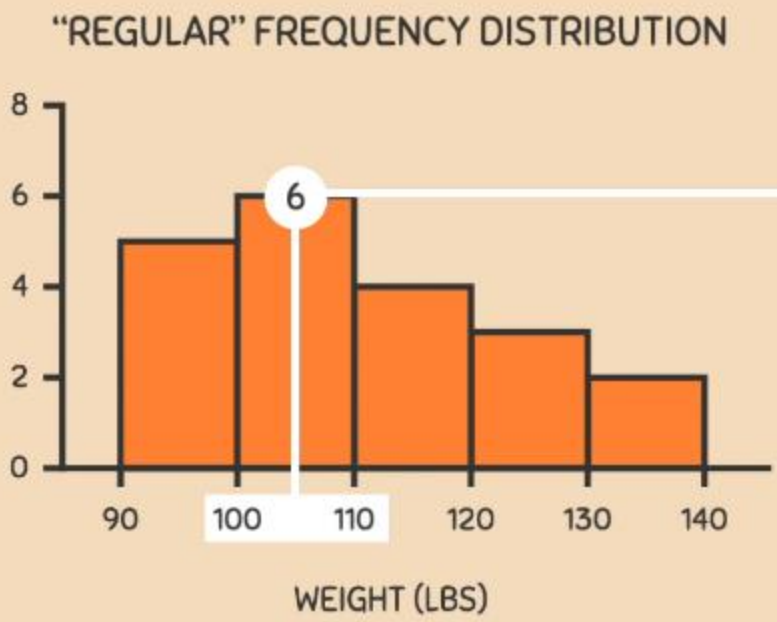

RELATIVE FREQUENCY DISTRIBUTION
0.4
0.3
0.2
0.1
0.0
25%
30%
20%
15%
10%
90
100
110
120
130
140
WEIGHT (LBS)

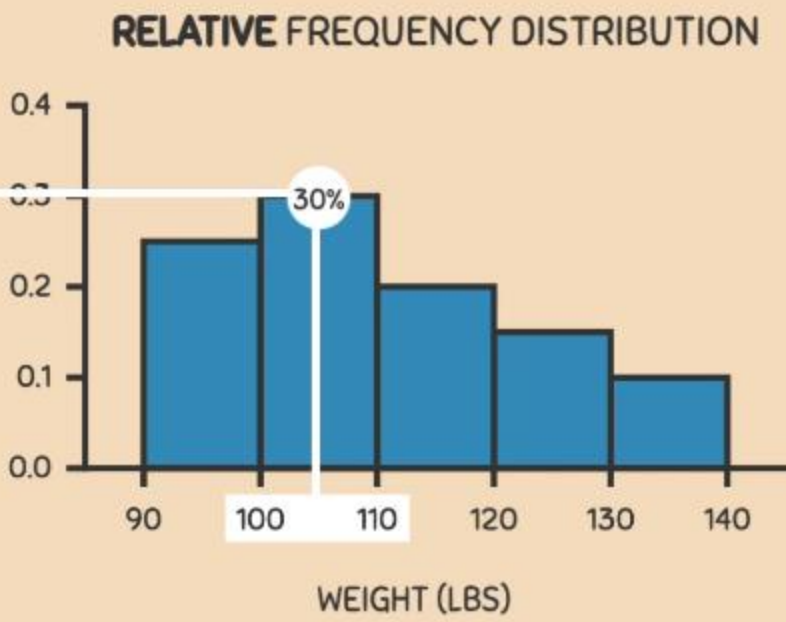
REVIEW

n = 20


"REGULAR" FREQUENCY DISTRIBUTION
8
6
4
2
0
90
100
110
120
130
140
RELATIVE FREQUENCY DISTRIBUTION
0.4
0.3
0.2
0.1
0.0
90
100
110
120
130
140

REVIEW

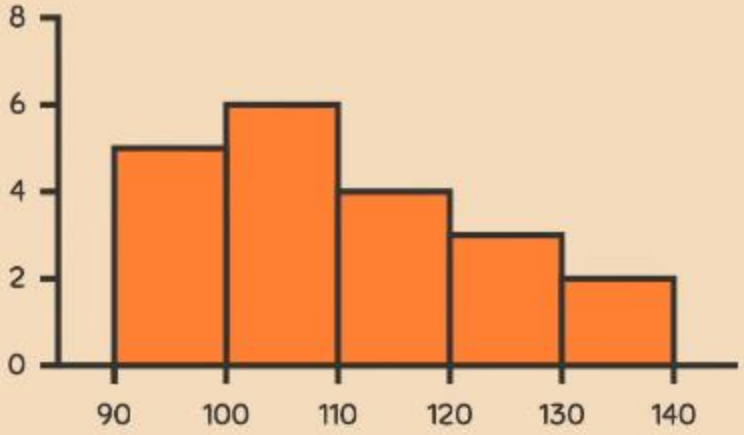

"REGULAR" FREQUENCY DISTRIBUTION
8
6
4
2
0
6
90
100
110
120
130
140
WEIGHT (LBS)


RELATIVE FREQUENCY DISTRIBUTION
0.4
0.2
0.1
0.0
30%
90
100
110
120
130
140
WEIGHT (LBS)

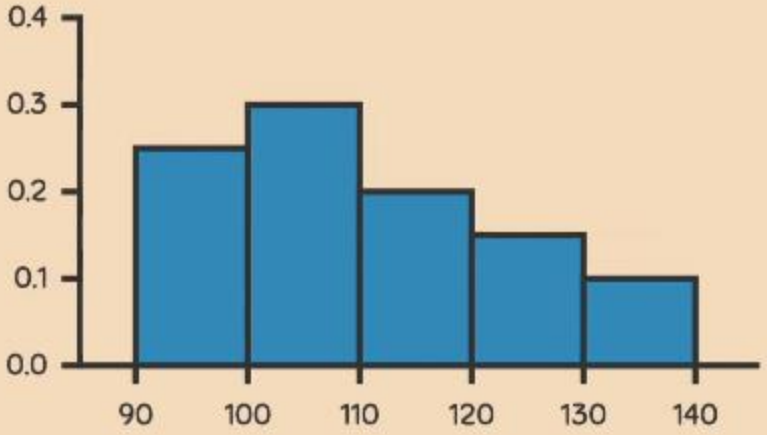
REVIEW

n = 20

"REGULAR" FREQUENCY DISTRIBUTION



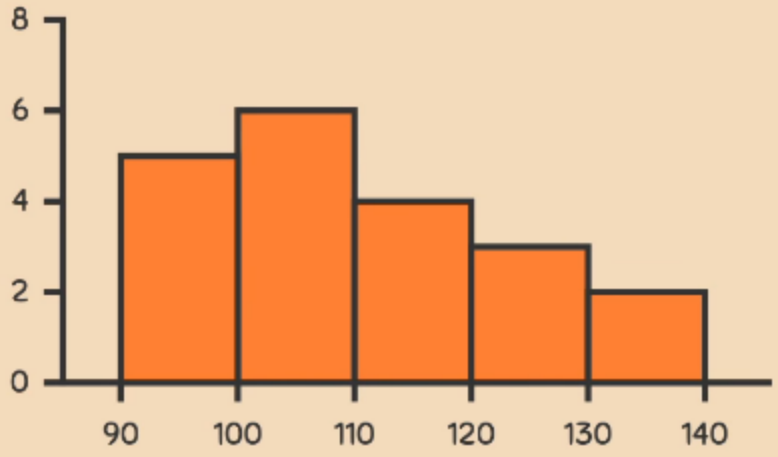
RELATIVE FREQUENCY DISTRIBUTION

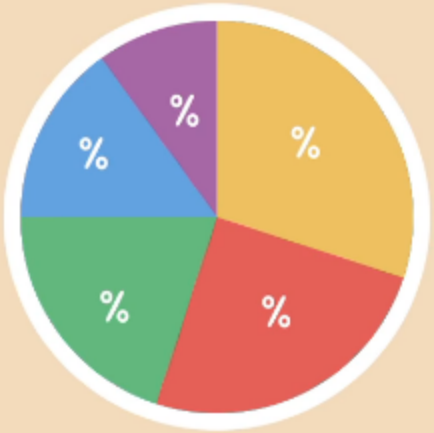


REVIEW

n = 20

"REGULAR" FREQUENCY DISTRIBUTION

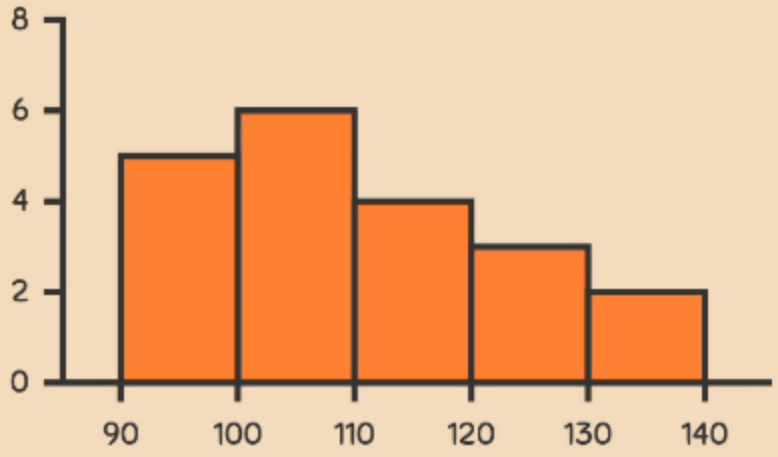




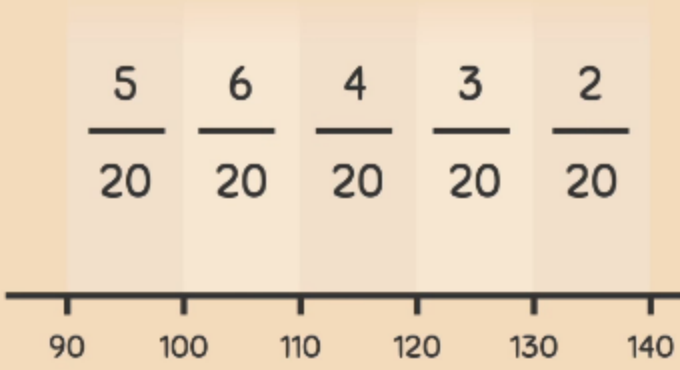
REVIEW

n = 20

"REGULAR" FREQUENCY DISTRIBUTION



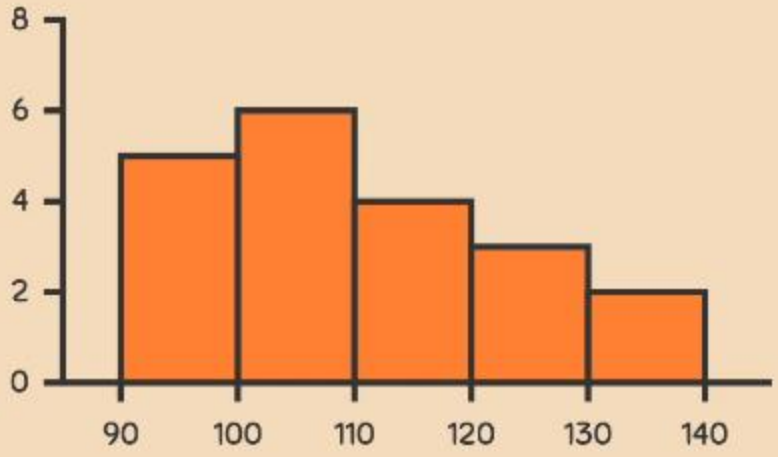
→

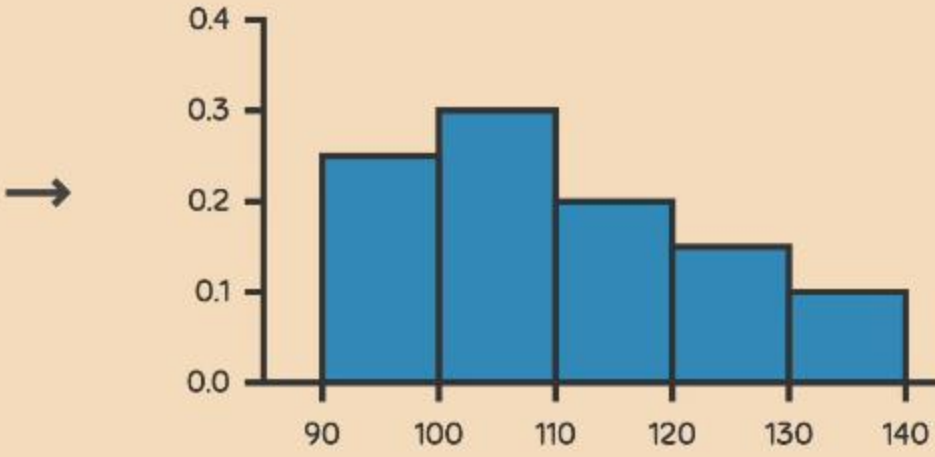


REVIEW

$0.25 + 0.30 + 0.20 + 0.15 + 0.10 = 1$

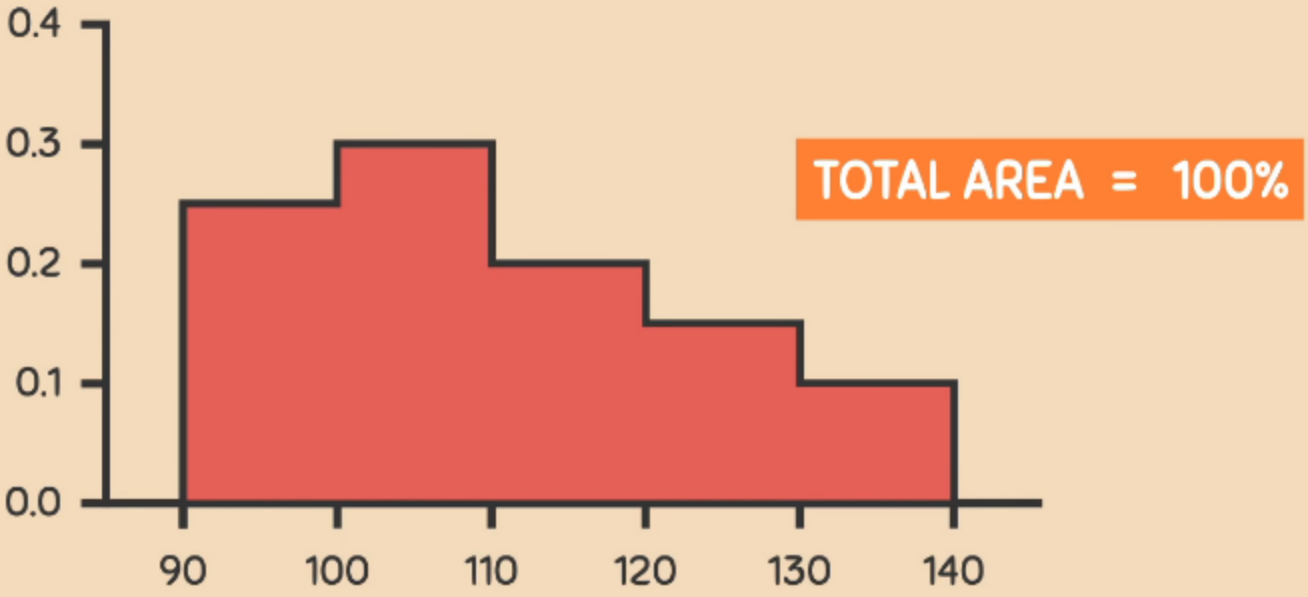
"REGULAR" FREQUENCY DISTRIBUTION



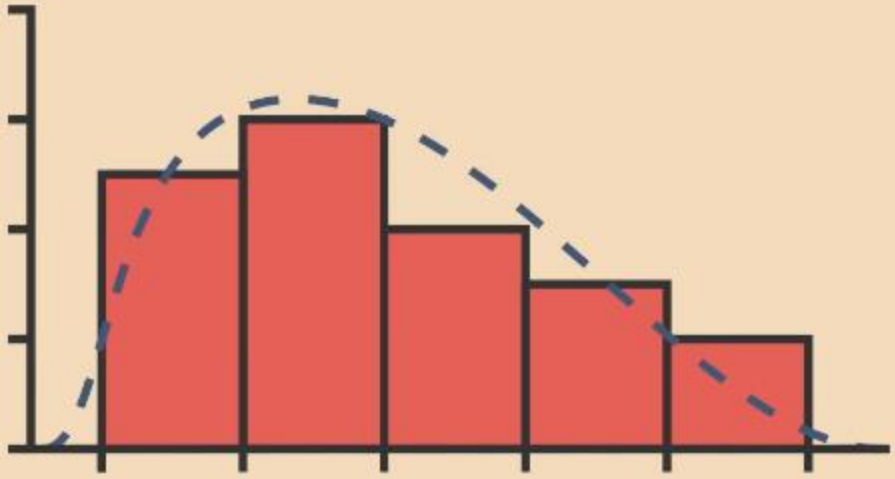


REVIEW

RELATIVE FREQUENCY DISTRIBUTION

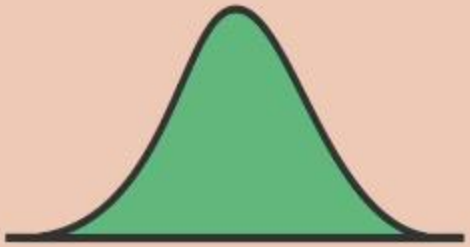


DENSITY CURVE

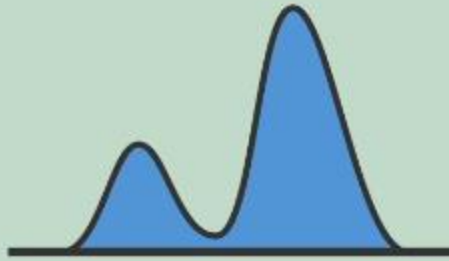


DENSITY CURVES

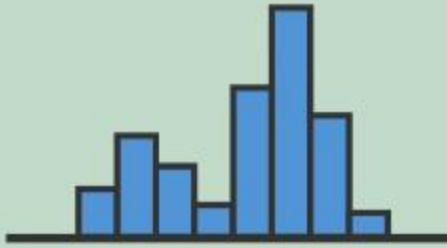
TOTAL AREA = 1



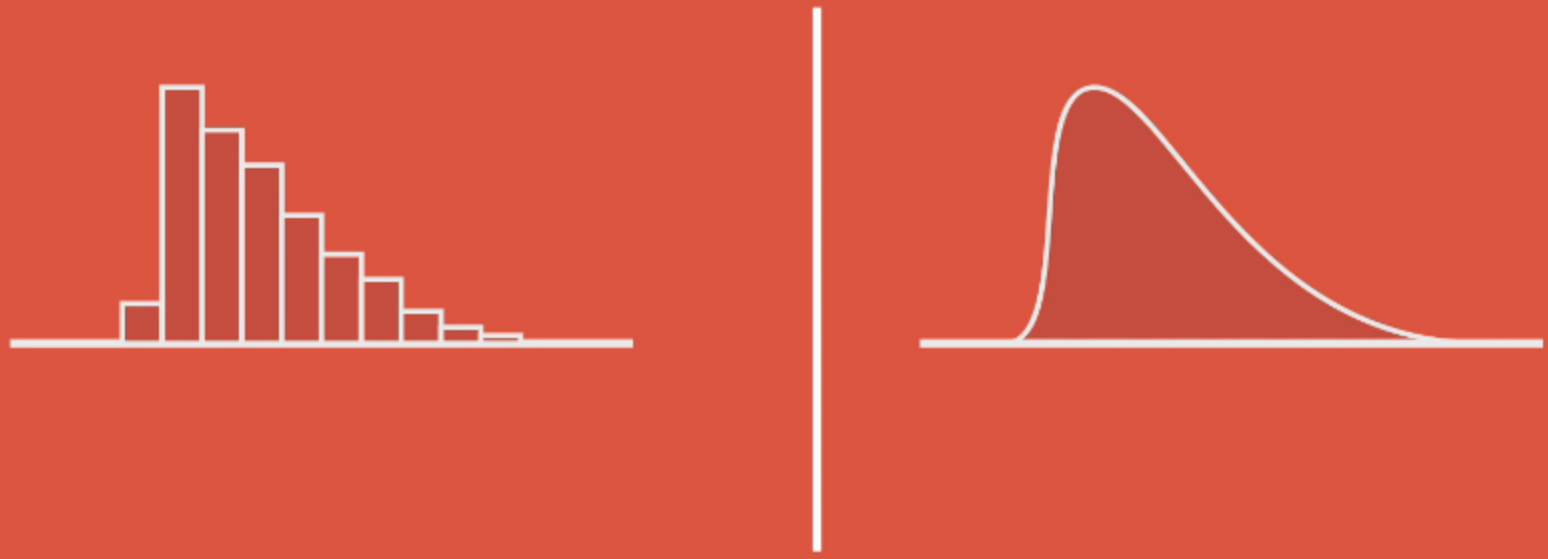
TOTAL AREA = 1



TOTAL AREA = 1

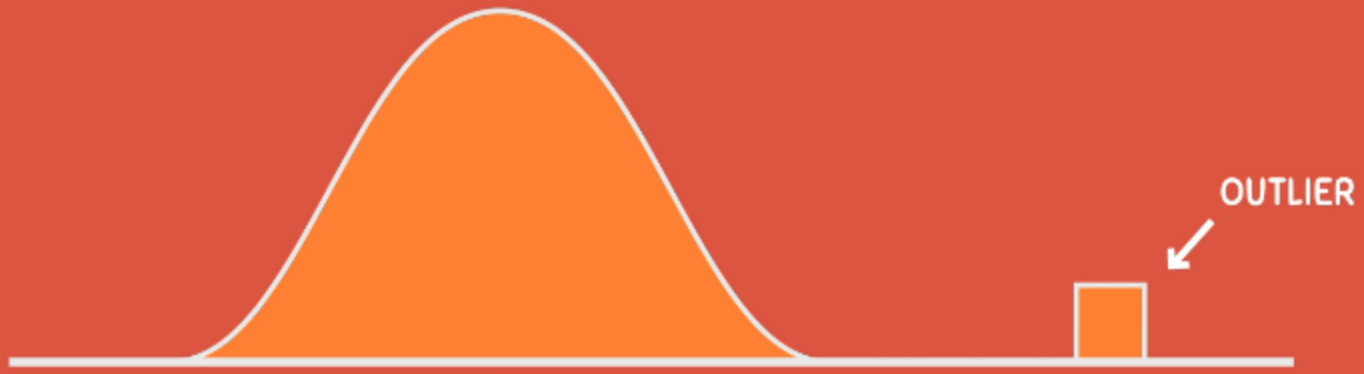


RELATIVE FREQUENCY DISTRIBUTIONS

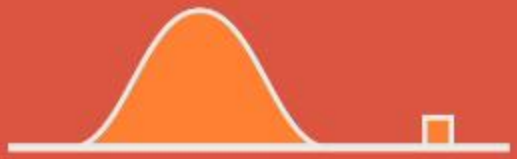


ADVANTAGES

1



1

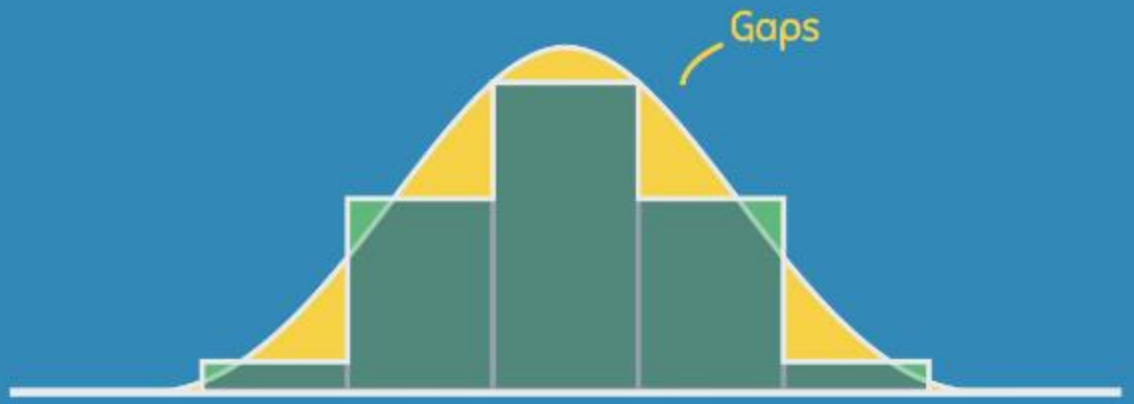


2

3

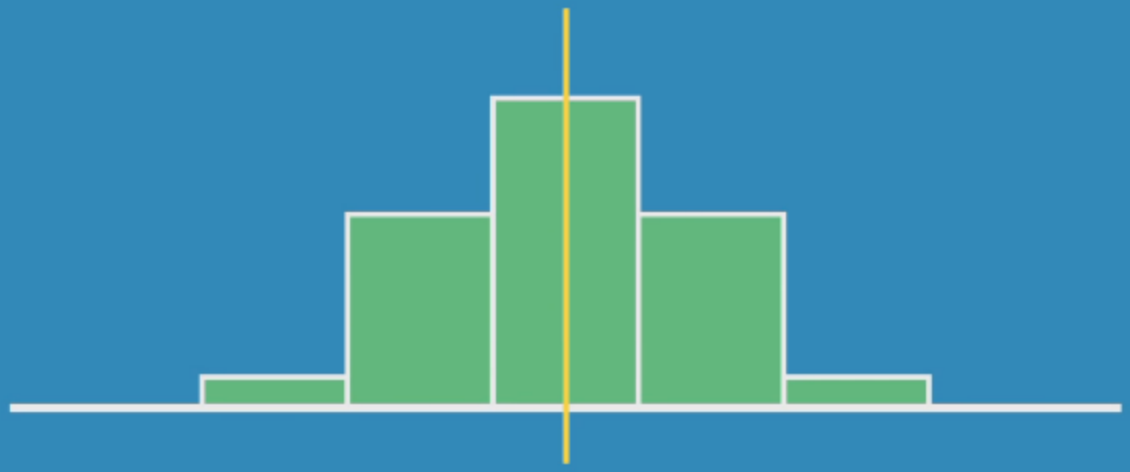
PRACTICALITY

POPULATION SIZE

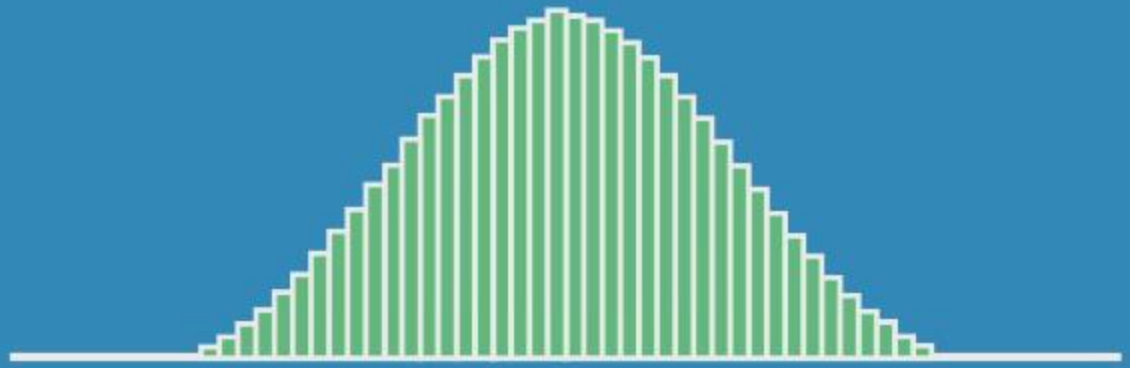


n = 50

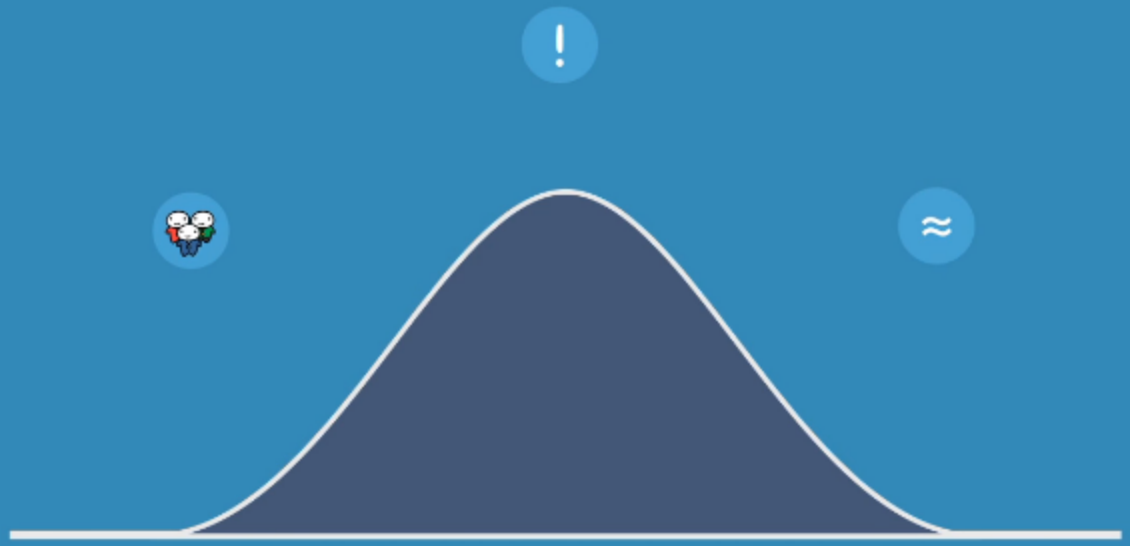
n = 100,000



n = 100,000

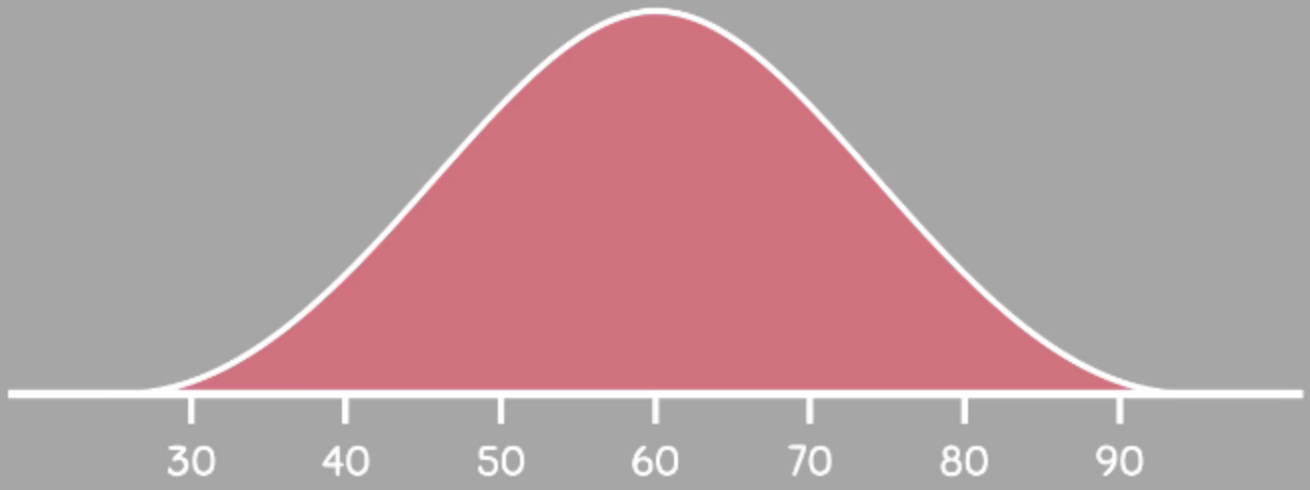


n = 100,000


!
≈
n = 100,000

TEST SCORES

n = 1,000,000

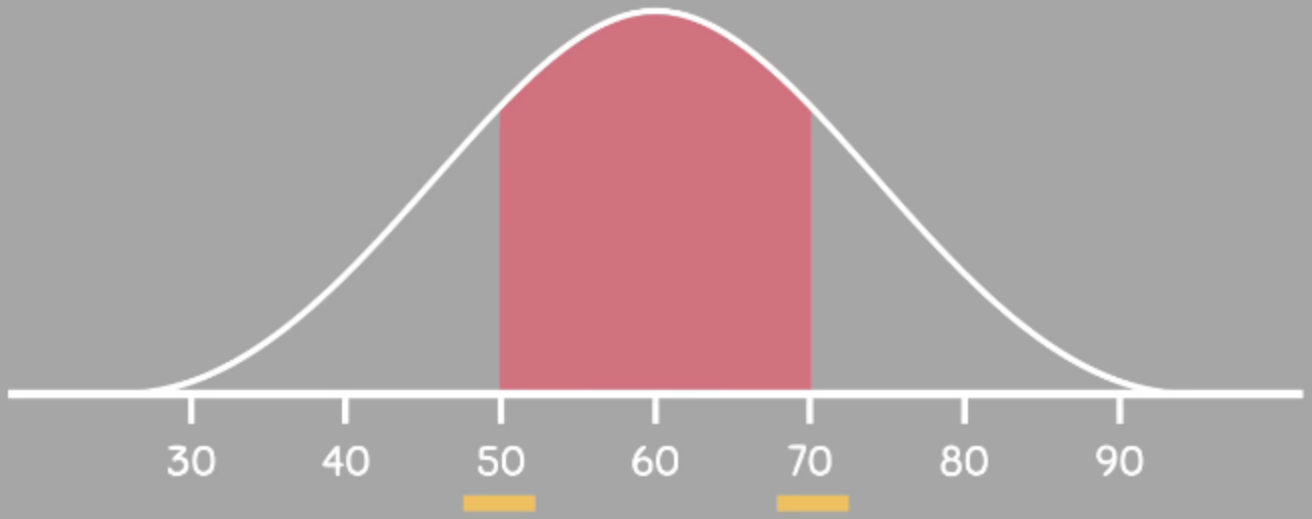


TEST SCORES

n = 1,000,000

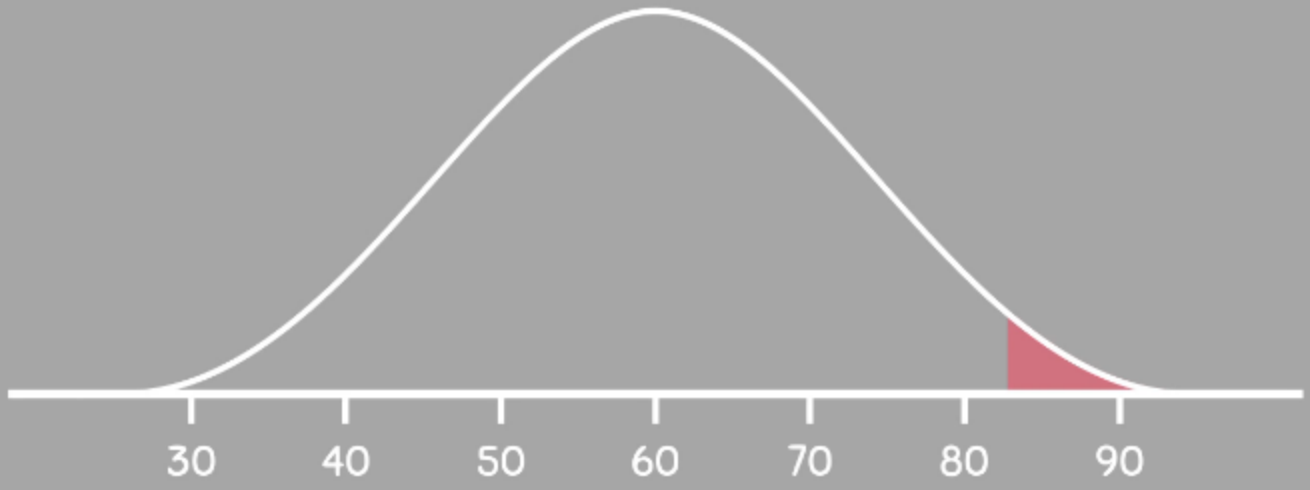
TEST SCORES

n = 1,000,000



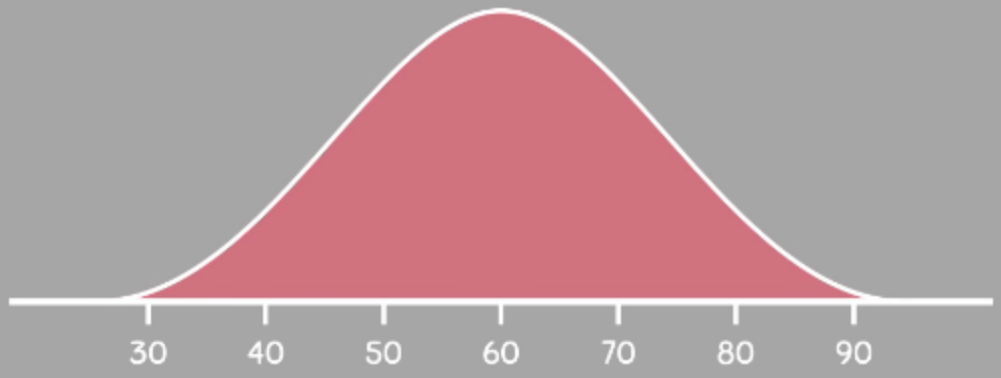
TEST SCORES

n = 1,000,000



TEST SCORES

n = 1,000,000



DENSITY CURVE

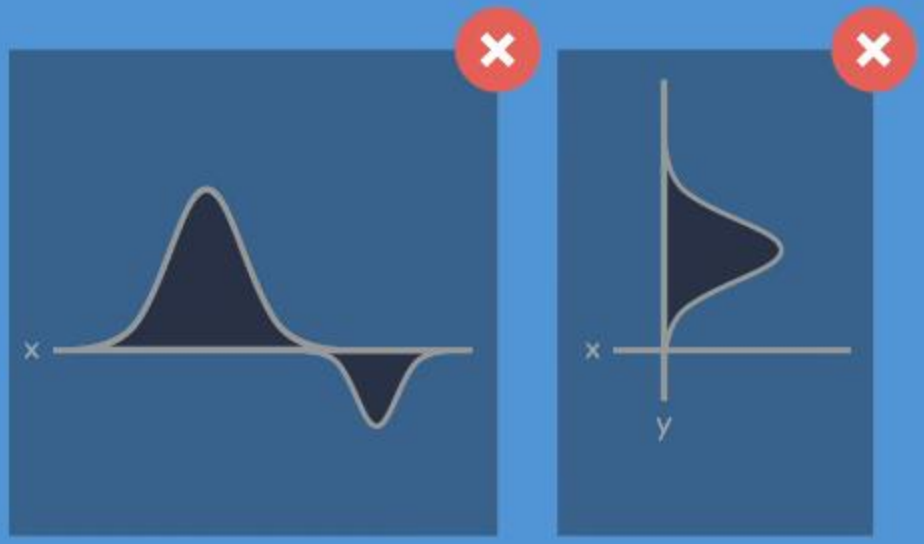
IMPORTANT RULES

DENSITY CURVE

PROPERTIES OF DENSITY CURVES

1. A density curve must lie on or above the horizontal axis

DENSITY CURVE



PROPERTIES OF DENSITY CURVES

1. A density curve must lie on or above the horizontal axis

DENSITY CURVE

TOTAL AREA = 100 %

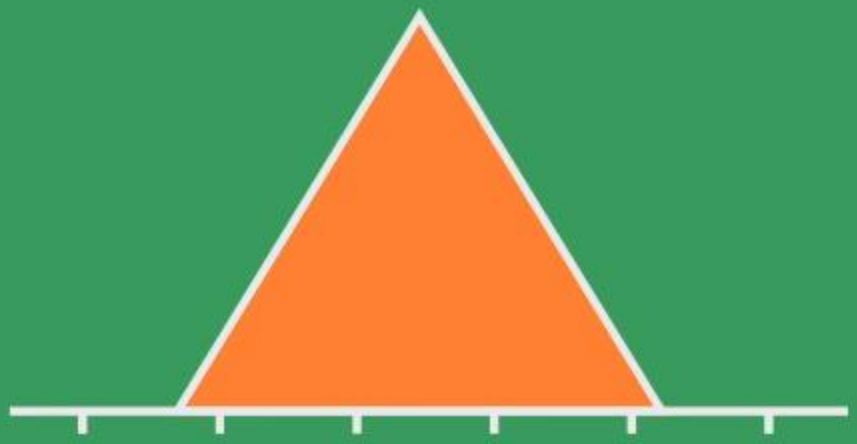
PROPERTIES OF DENSITY CURVES

1. A density curve must lie on or above the horizontal axis

2. The total area under the curve is always equal to 1

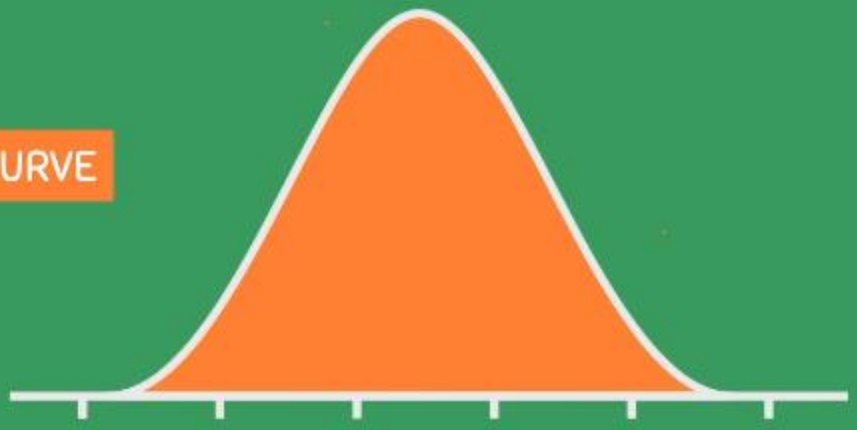
UNIFORM DISTRIBUTION

TRIANGULAR DISTRIBUTION



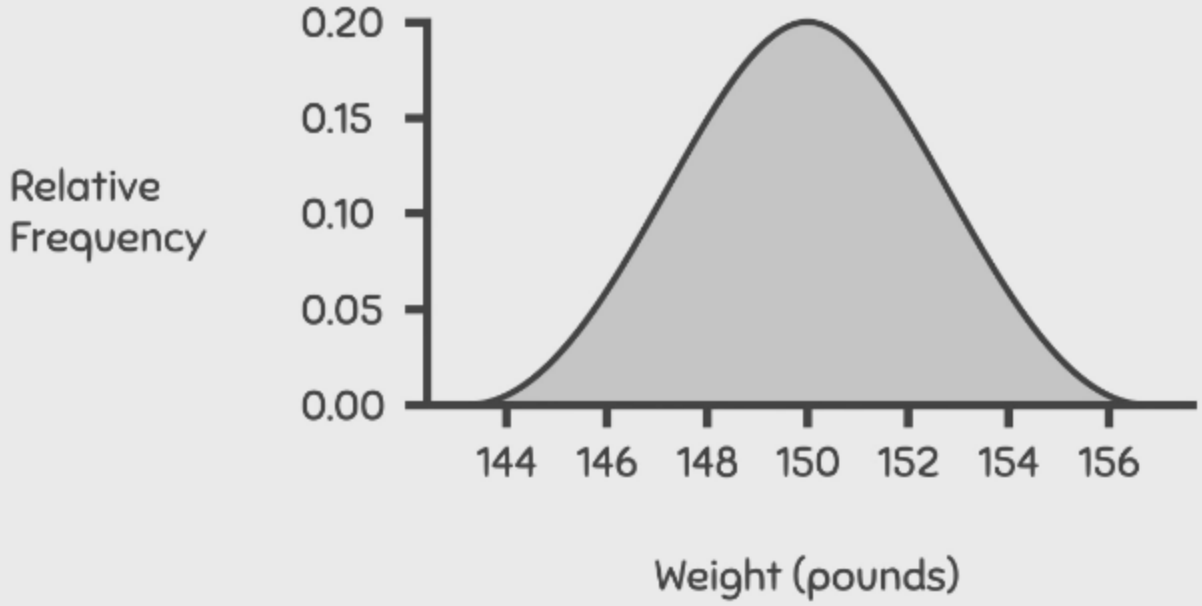
NORMAL DISTRIBUTION

BELL CURVE



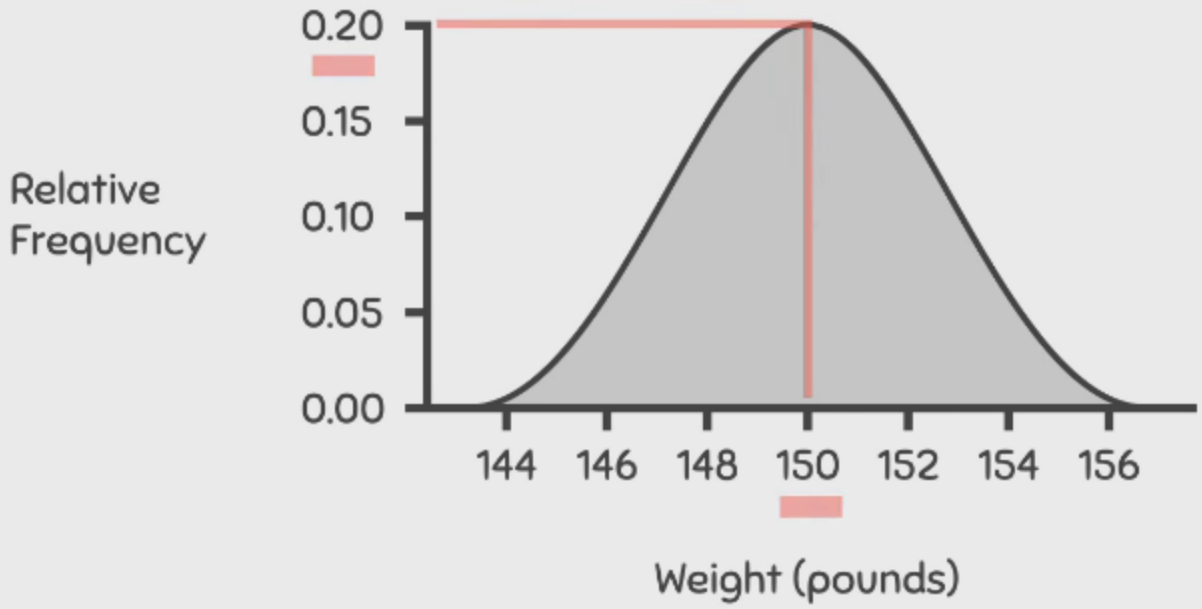
PRACTICE QUESTIONS

1. For the density curve below, approximately what percentage of people weigh exactly 150 pounds?



PRACTICE QUESTIONS

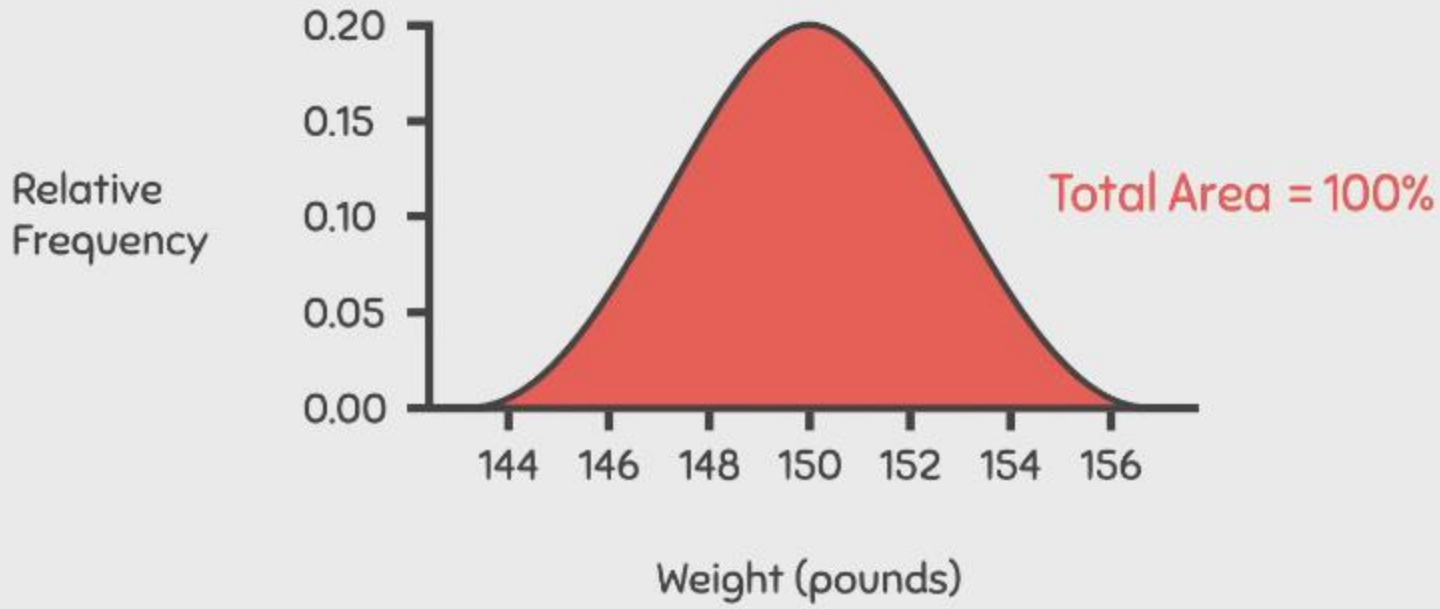
1. For the density curve below, approximately what percentage of people weigh exactly 150 pounds?



ANSWER = 20%

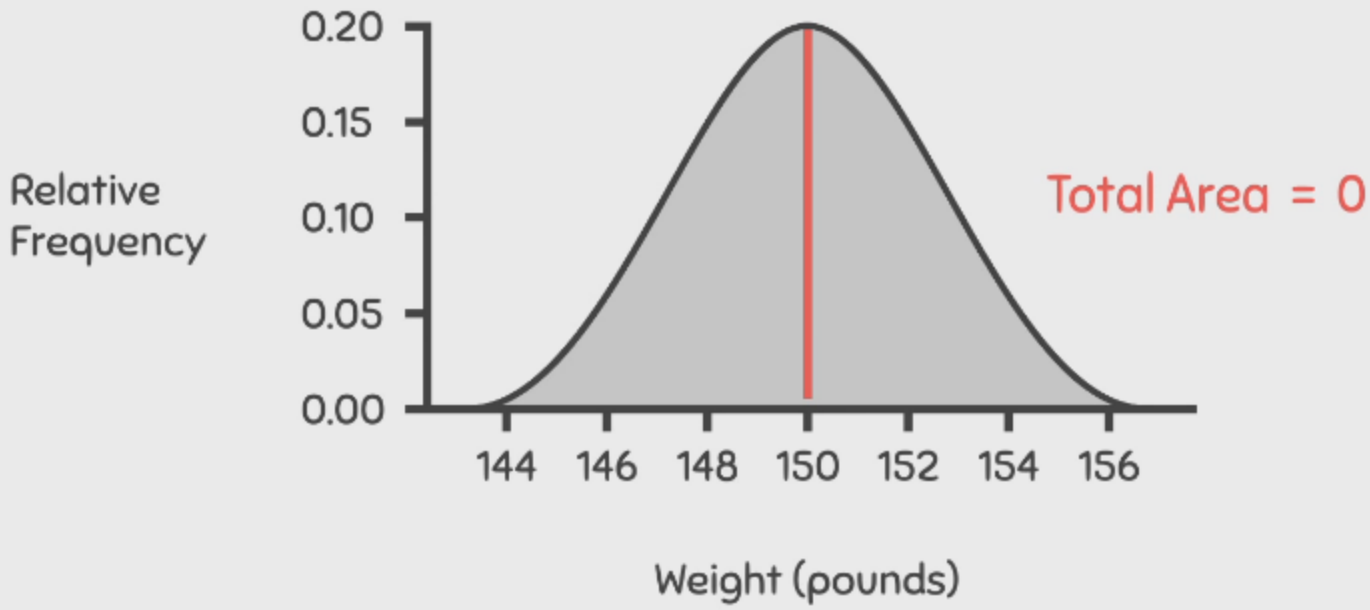
PRACTICE QUESTIONS

1. For the density curve below, approximately what percentage of people weigh exactly 150 pounds?



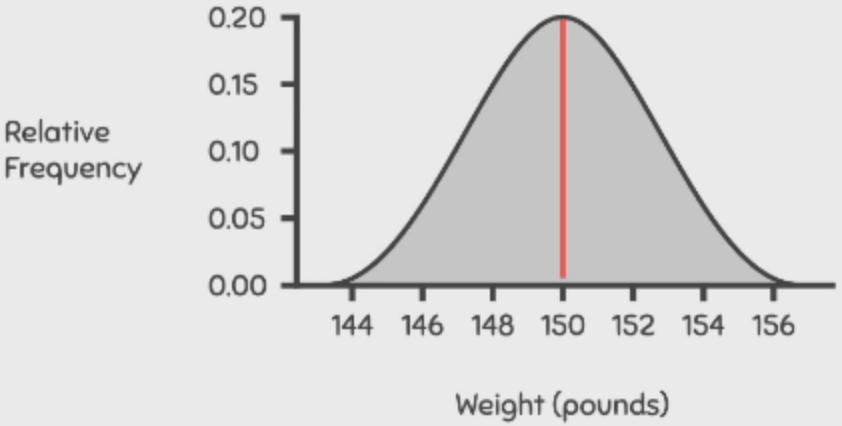
PRACTICE QUESTIONS

1. For the density curve below, approximately what percentage of people weigh exactly 150 pounds?



PRACTICE QUESTIONS

1. For the density curve below, approximately what percentage of people weigh exactly 150 pounds?



ANSWER = 0

150.000 lbs

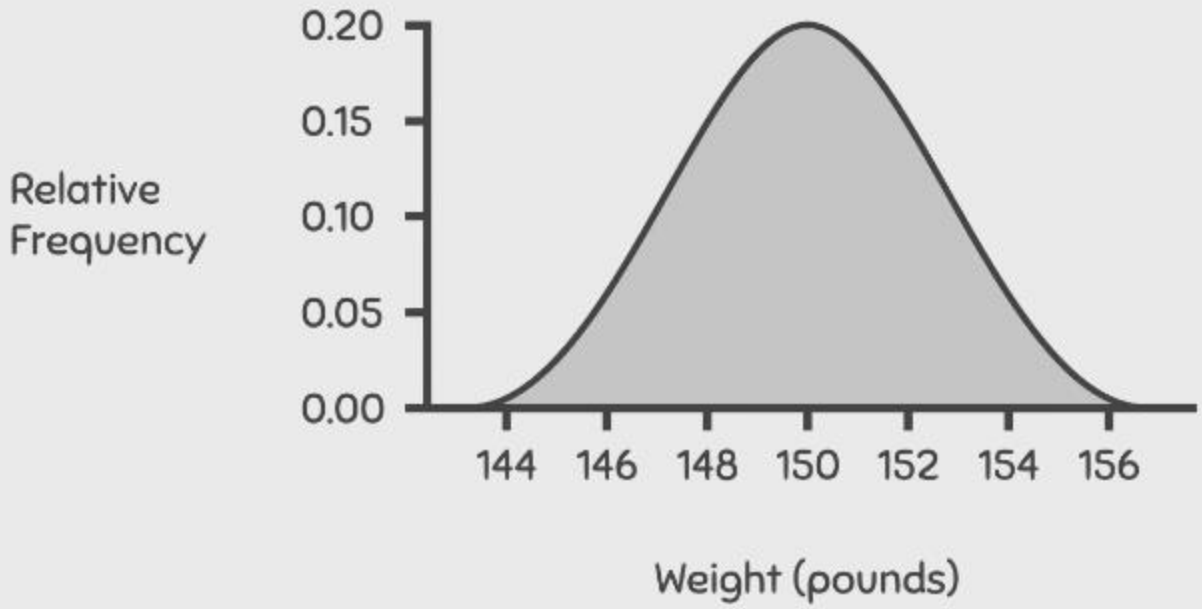
150.5

150.70

150.0

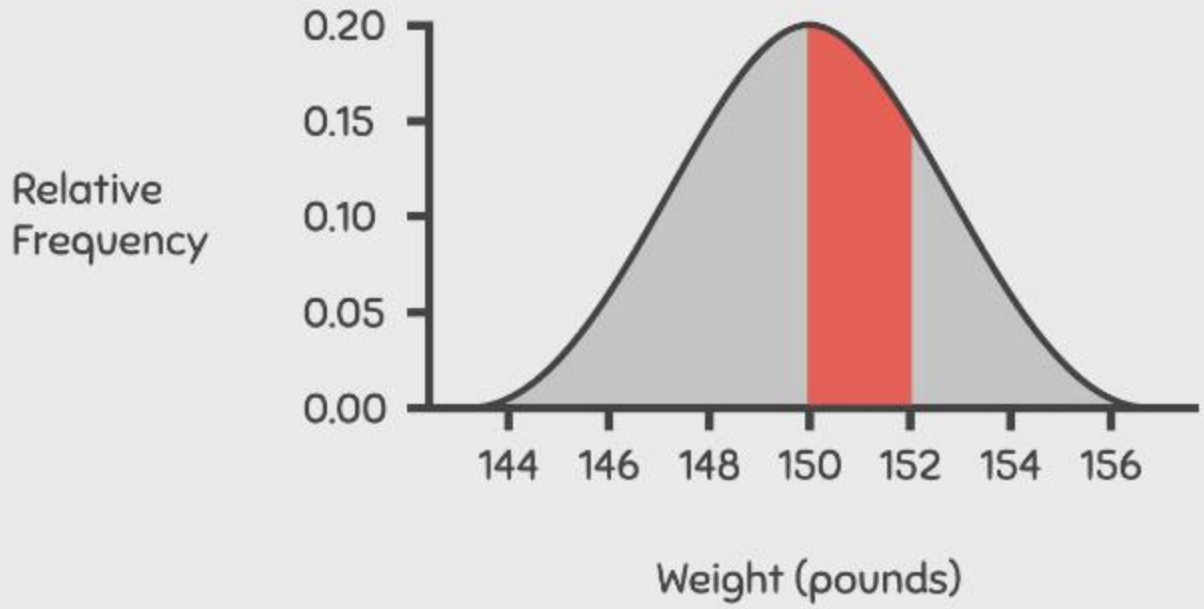
PRACTICE QUESTIONS

What percentage of people weigh between 150 and 152 pounds?



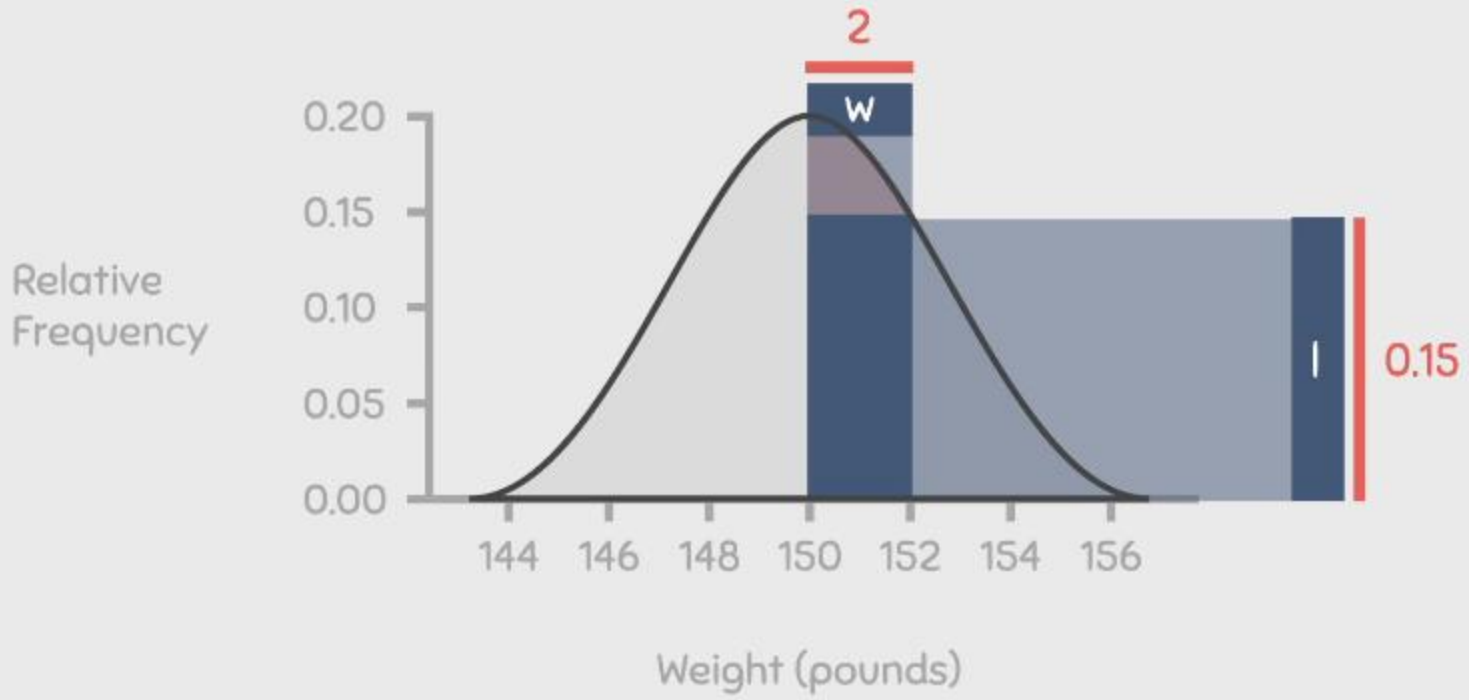
PRACTICE QUESTIONS

What percentage of people weigh between 150 and 152 pounds?



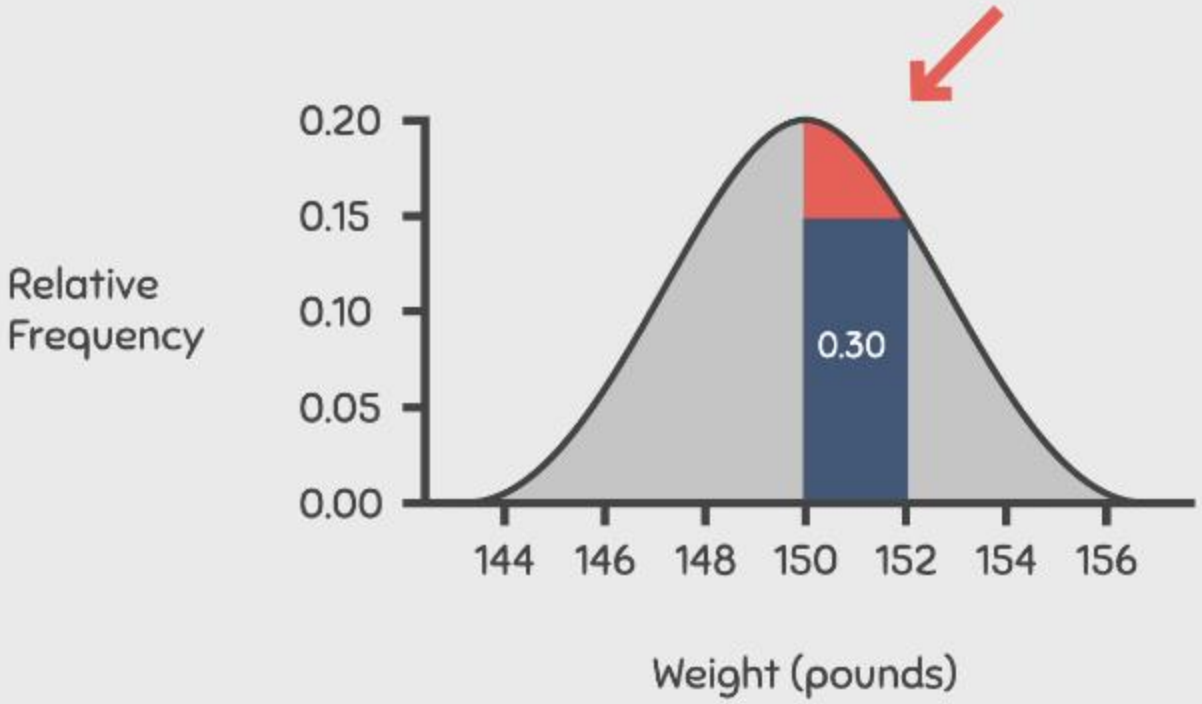
PRACTICE QUESTIONS

What percentage of people weigh between 150 and 152 pounds?



PRACTICE QUESTIONS

What percentage of people weigh between 150 and 152 pounds?



ROUGH ESTIMAT

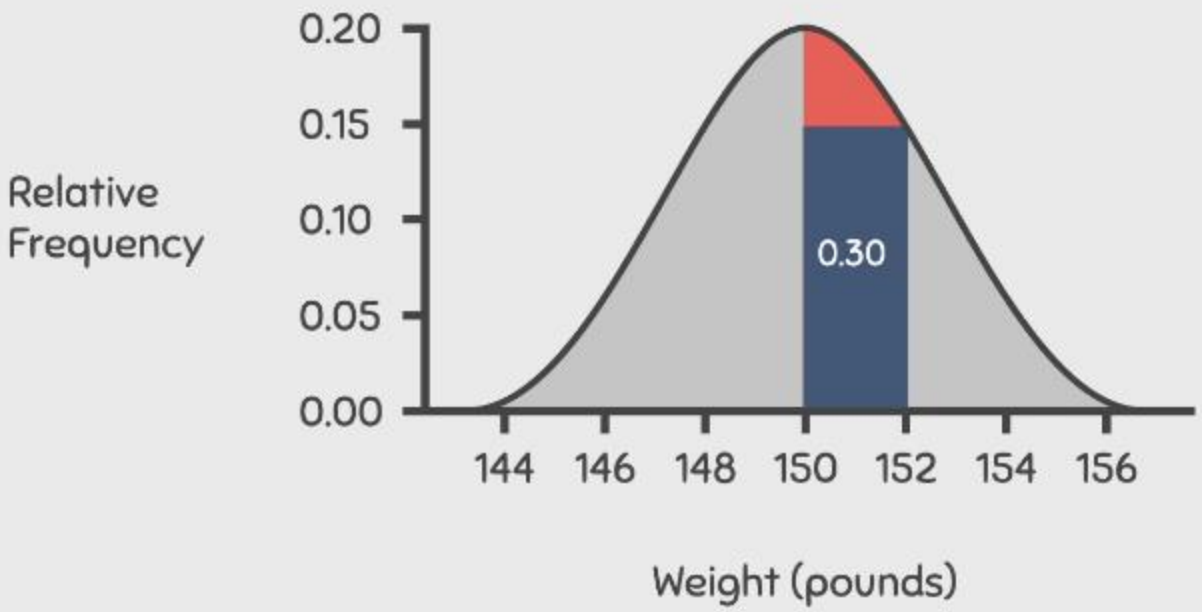
Area = L x W

= 0.15 x 2

= 0.30

PRACTICE QUESTIONS

What percentage of people weigh between 150 and 152 pounds?



ROUGH ESTIMAT

Area = L x W

= 0.15 x 2

= 0.30

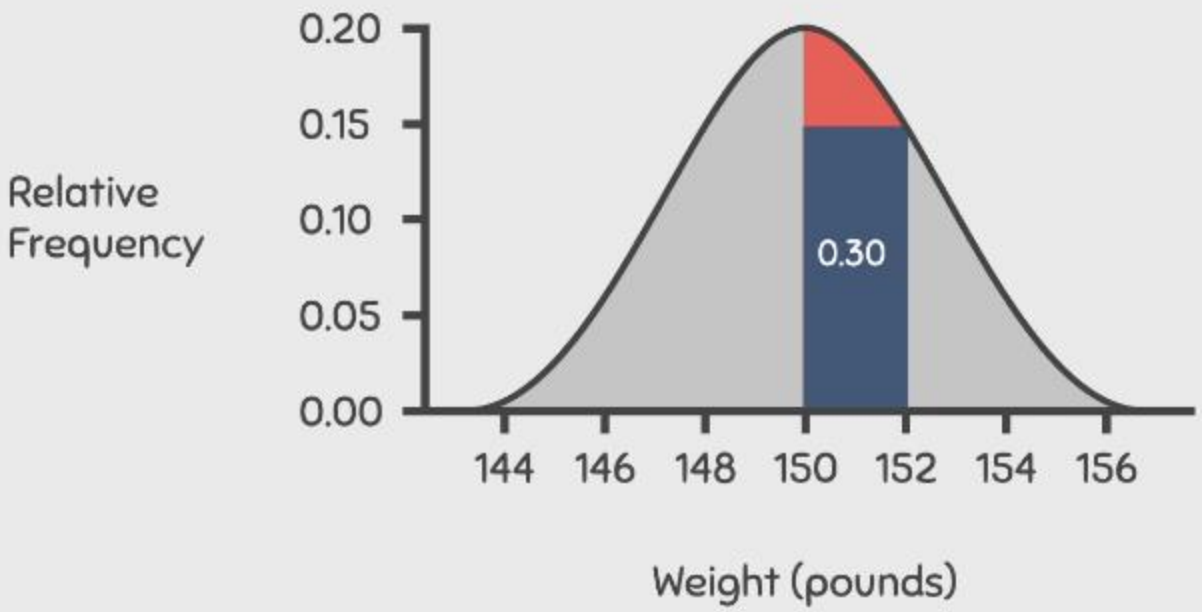
Area = L x W

2

0.05

PRACTICE QUESTIONS

What percentage of people weigh between 150 and 152 pounds?



ROUGH ESTIMAT

Area = L x W

= 0.15 x 2

= 0.30

Area = L x W

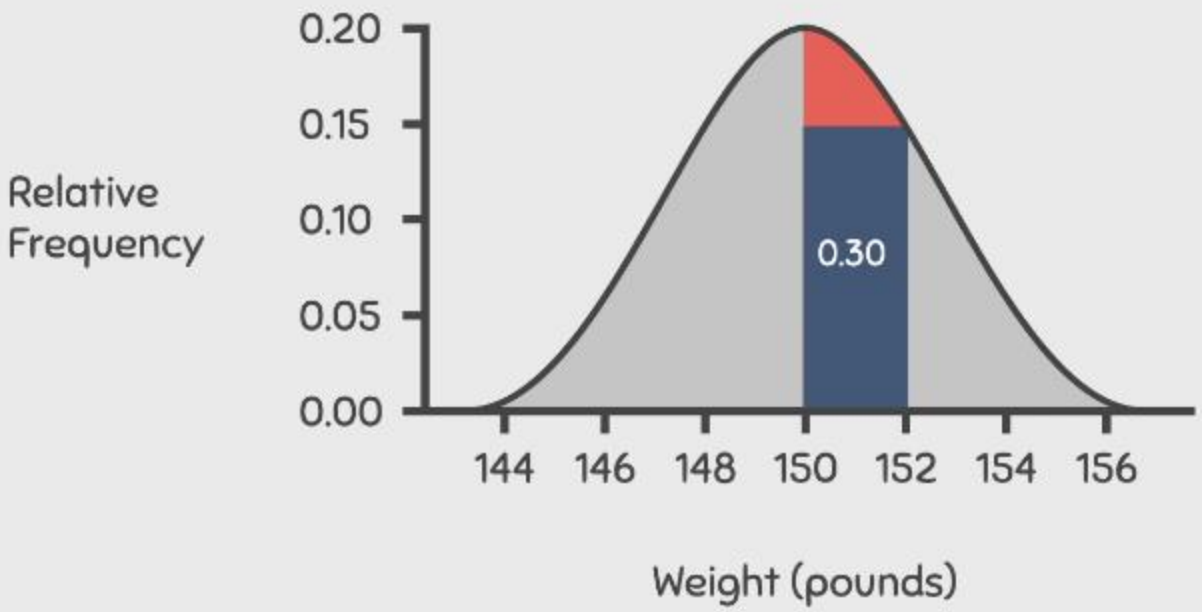
= 0.05 x 2

= 0.1

0.1

PRACTICE QUESTIONS

What percentage of people weigh between 150 and 152 pounds?



ROUGH ESTIMAT

Area = L x W

= 0.15 x 2

= 0.30

Area = L x W

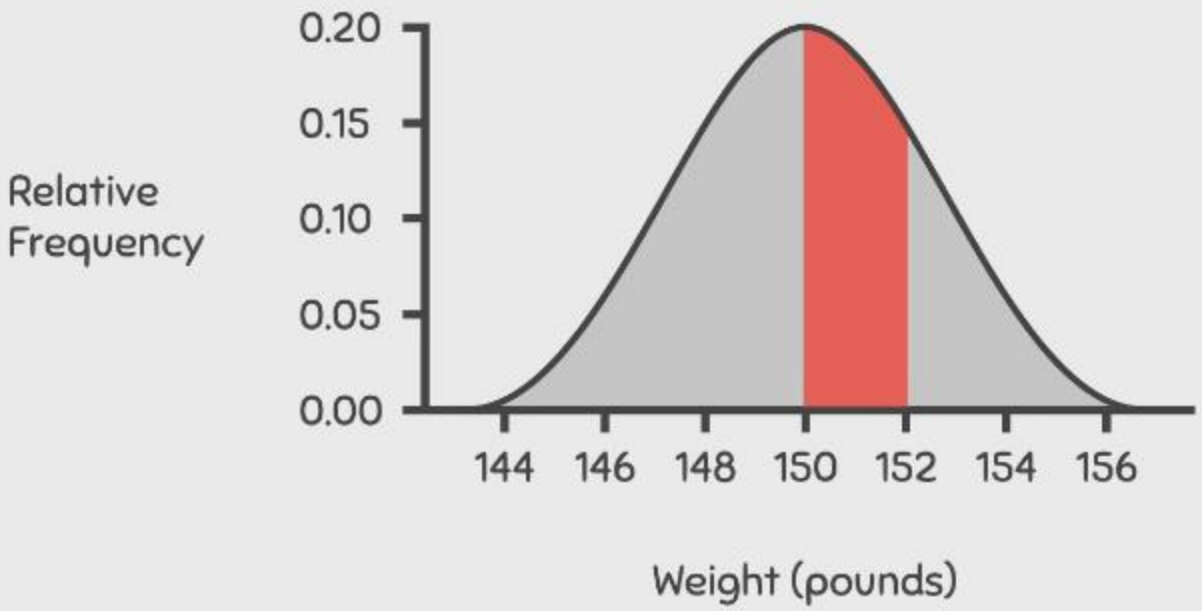
= 0.05 x 2

= 0.1

0.1 ÷ 2 = 0.05

PRACTICE QUESTIONS

What percentage of people weigh between 150 and 152 pounds?



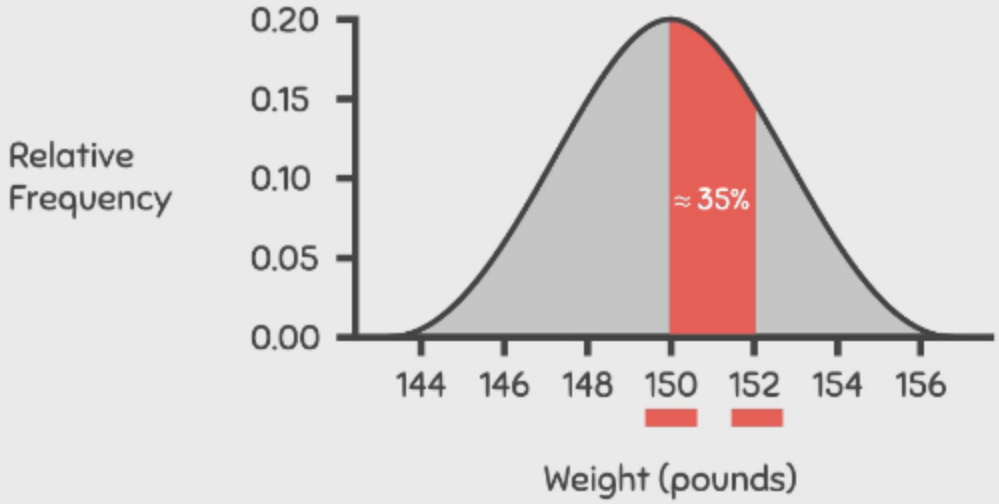
ROUGH ESTIMAT

Total Area = 0.05 + 0

= 0.35

PRACTICE QUESTIONS

What percentage of people weigh between 150 and 152 pounds?

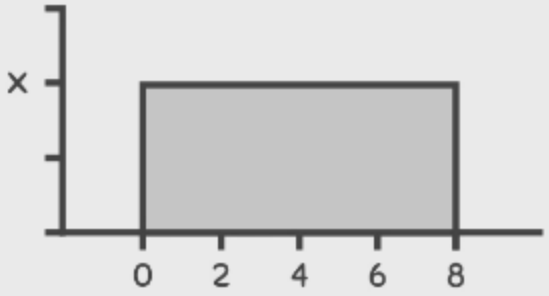


PRACTICE QUESTIONS

❷ For the uniform distribution below, what must be its width in order for it to be a valid density curve?

PRACTICE QUESTIONS

❷ For the uniform distribution below, what must be its width in order for it to be a valid density curve?



Area = L x W

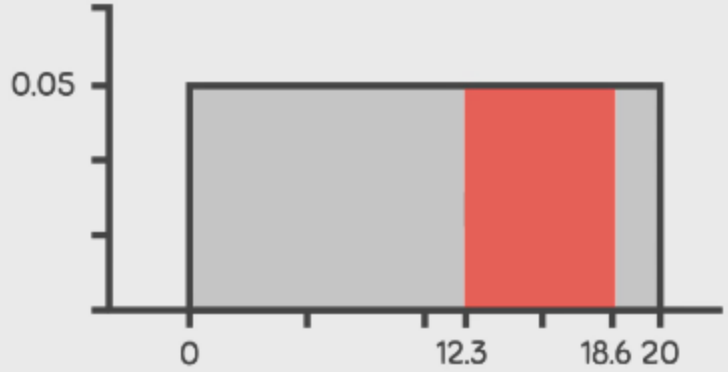
W = Area ÷ L

= 1 ÷ 8

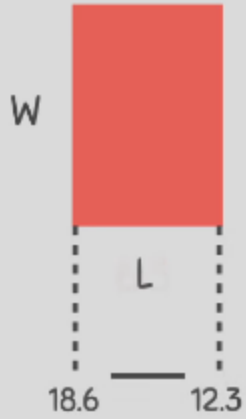
W = 0.125

PRACTICE QUESTIONS

❸ For the uniform distribution below, what proportion of values are located between 12.3 and 18.6?

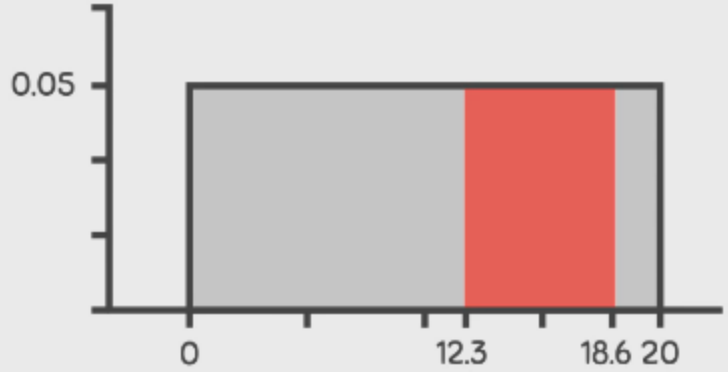


Area = L x W

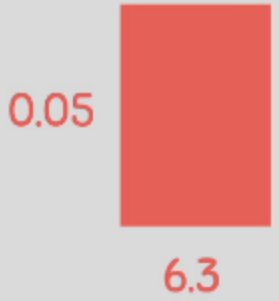


PRACTICE QUESTIONS

❸ For the uniform distribution below, what proportion of values are located between 12.3 and 18.6?

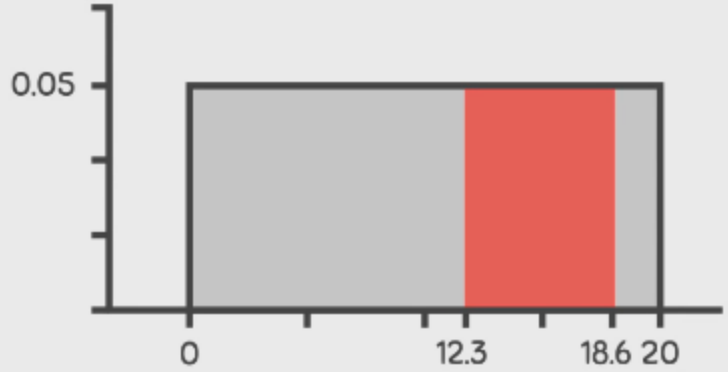


Area = L x W



PRACTICE QUESTIONS

❸ For the uniform distribution below, what proportion of values are located between 12.3 and 18.6?



Area = L x W

= 6.3 x 0.05

Area = 0.315

PRACTICE QUESTIONS

❸ For the uniform distribution below, what proportion of values are located between 12.3 and 18.6?