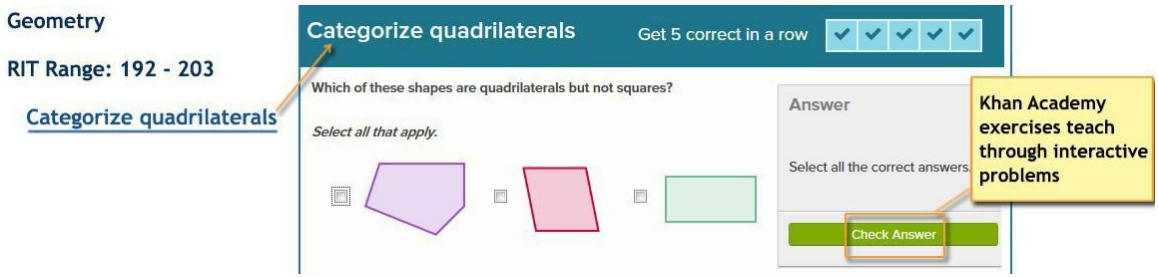
MAP Growth Mathematics to Khan Academy

Khan Academy Practice Exercises Correlated to RIT

Common Core MAP Growth Math 6+

About this Document

This document correlates MAP® Growth™ test sub-goals and RIT ranges to Khan Academy® exercises. The Khan Academy exercises are interactive problems for students with instant feedback.



Having these exercises correlated to RIT ranges means you can use them in conjunction with your flexible student groupings that are also informed by RIT score results. The exercises are also useful for targeting learning in each student's zone of proximal development (Vygotsky).

The correlation between MAP Growth RIT scores and the Khan Academy exercises was determined by using our 2020 norms data to approximate grade levels, which were then matched to the corresponding Common Core State Standards (CCSS). Teachers in states that have not adopted the CCSS may still find these resources valuable by relating goals or sub-goals that are similar to CCSS goals and sub- goals.

NWEA plans to work with Khan Academy to update these links twice a year as new exercises are developed.

How to Use

1. Use MAP Growth reports to find the RIT scores for a given sub-goal.
2. In this document, locate that same goal, approximate RIT range, and sub-goals.
3. To choose appropriate Khan Academy exercises:
   - Consider both the name of the exercise and the CCSS standard.
   - Click the link and try the exercise yourself.
     Note: When you're in Khan Academy, the links to videos and other resources add context to the actual exercise, but are not necessarily correlated to MAP Growth.
4. In the browser window where the exercise opened, note or copy the Web address URL.
5. Optionally deliver exercises to students. For example:
   - Paste the URL into an online document for students to access.
   - Present the exercise in the classroom.
   - Use for parent-teacher conference discussion.

Limitations

The instructional suggestions presented in this document are intended to provide supplementary resources based on available Khan Academy exercises and are not intended to replace other options. MAP Growth data should be used as one of many data points for instructional decisions rather than as a placement guide.

Terms of Use

MAP Growth Mathematics
Khan Academy Practice Exercises Correlation

Common Core Math 6+

Statistics and Probability

Interpreting Categorical and Quantitative Data

	Standards Alignment
RIT Range: 189-200	
Create bar graphs	3.MD.B.3
Create picture graphs (picture more than 1)	3.MD.B.3
Read bar graphs and solve 1-step problems	3.MD.B.3
Read bar graphs and solve 2 step problems	3.MD.B.3
Read picture graphs	3.MD.B.3
Read picture graphs (multi-step problems)	3.MD.B.3
Graph data on line plots	3.MD.B.4
Read line plots (data with fractions)	3.MD.B.4
RIT Range: 201-210	
Interpret dot plots with fractions 1	4.MD.B.4
RIT Range: 211-217	
Interpret dot plots with fraction operations	5.MD.B.2
RIT Range: 218-221	
Statistical questions	6.SP.A.1
Clusters, gaps, peaks, & outliers	6.SP.A.2
Shape of distributions	6.SP.A.2
Reading box plots	6.SP.A.2 | 6.SP.B.4 | 6.SP.B.5
Estimate center using dot plots	6.SP.A.3 | 6.SP.B.4 | 6.SP.B.5
Reading dot plots & frequency tables	6.SP.A.3 | 6.SP.B.4 | 6.SP.B.5
Data set warm-up	6.SP.A.3 | 6.SP.B.5
Effects of shifting, adding, & removing a data point	6.SP.A.3 | 6.SP.B.5
Create histograms	6.SP.B.4
Creating box plots	6.SP.B.4
Creating dot plots	6.SP.B.4
Creating frequency tables	6.SP.B.4

Statistics and Probability

Interpreting Categorical and Quantitative Data	Standards Alignment
RIT Range: 218-221	
Calculating the mean: data displays	6.SP.B.4 | 6.SP.B.5
Calculating the median: data displays	6.SP.B.4 | 6.SP.B.5
Comparing data displays	6.SP.B.4 | 6.SP.B.5
Estimate center using histograms	6.SP.B.4 | 6.SP.B.5
Read histograms	6.SP.B.4 | 6.SP.B.5
Calculating the mean	6.SP.B.5
Calculating the median	6.SP.B.5
Interpreting quartiles	6.SP.B.5
Interquartile range (IQR)	6.SP.B.5
Median & range puzzlers	6.SP.B.5
Missing value given the mean	6.SP.B.5
RIT Range: 222-226	
Comparing distributions	7.SP.B.3 | 7.SP.B.4
RIT Range: 227-228	
Constructing scatter plots	8.SP.A.1
Describing trends in scatter plots	8.SP.A.1
Making appropriate scatter plots	8.SP.A.1
Positive and negative linear associations from scatter plots	8.SP.A.1
Eyeballing the line of best fit	8.SP.A.2
Estimating equations of lines of best fit, and using them to make predictions	8.SP.A.3
Estimating slope of line of best fit	8.SP.A.3
Interpreting slope and y-intercept for linear models	8.SP.A.3
Create two-way frequency tables	8.SP.A.4
Create two-way relative frequency tables	8.SP.A.4
Interpreting two-way tables	8.SP.A.4

Statistics and Probability

Interpreting Categorical and Quantitative Data	Standards Alignment
RIT Range: 227-228	
Read two-way frequency tables	8.SP.A.4
Reading two-way relative frequency tables	8.SP.A.4
RIT Range: 229-252	
Comparing data distributions	HSS-ID.A.1 | HSS-ID.A.2 | HSS-ID.A.3
Standard deviation of a population	HSS-ID.A.2
Empirical rule	HSS-ID.A.4
Normal distribution: Area above or below a point	HSS-ID.A.4
Normal distribution: Area between two points	HSS-ID.A.4
Z-scores 1	HSS-ID.A.4
Trends in categorical data	HSS-ID.B.5
Fitting quadratic and exponential functions to scatter plots	HSS-ID.B.6
Correlation coefficient intuition	HSS-ID.C.8
Types of statistical studies	HSS-ID.C.9

Statistics and Probability

Using Sampling and Probability to Make Decisions	Standards Alignment
RIT Range: 222-226	
Making inferences from random samples	7.SP.A.1 | 7.SP.A.2
Valid claims	7.SP.A.1 | 7.SP.A.2
Probability models	7.SP.C.5 | 7.SP.C.6 | 7.SP.C.7
Experimental probability	7.SP.C.6
Making predictions with probability	7.SP.C.6 | 7.SP.C.7
Simple probability	7.SP.C.7
Probabilities of compound events	7.SP.C.8
Sample spaces for compound events	7.SP.C.8
The counting principle	7.SP.C.8
RIT Range: 229-252	
Basic set notation	HSS-CP.A.1
Subsets of sample spaces	HSS-CP.A.1
Dependent and independent events	HSS-CP.A.2 | HSS-CP.A.3
Trends in categorical data	HSS-CP.A.4 | HSS-CP.A.5 | HSS-CP.B.6
Dependent probability	HSS-CP.B.6
Adding probabilities	HSS-CP.B.7
Simple hypothesis testing	HSS-IC.A.2
Types of statistical studies	HSS-IC.B.3 | HSS-IC.B.6
Hypothesis testing in experiments	HSS-IC.B.5

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