

## ELMS Summer Mathematics Homework 2022

In the mathematics department at ELMS, we use many tools to ensure students' success, one of which is our IXL program. Skills will be due Thursday, August 25<sup>th</sup>, 2022. Students are HIGHLY encouraged to complete them, a bit at a time, over the summer months to keep those math skills sharp. Please complete all skills to a minimum Smart Score of 90.

New students - there is no need to purchase a subscription; your child will already be enrolled once accepted to ELMS. Please check our ELMS website for details. Access can be gained via Clever. Should you have any questions regarding the IXL summer homework, please contact Mrs. David for more information at [davidka@pcsb.org](mailto:davidka@pcsb.org)

**Fall 2022 Placement – Sixth-grade Math Accelerated – Complete the following skills in the **fifth-grade section** - No calculators permitted (20 links total)**

- GCF of three numbers (5.F.9)      SHORTCUT: 7TA
- LCM of three or more numbers (5.F.11)      SHORTCUT: ZPQ
- Compare, order, and round decimals: word problems (5.G.15)      SHORTCUT: 2MV
- Compare fractions and mixed numbers (5.K.10)      SHORTCUT: U8J
- Understand fractions as division: word problems (5.K.17)      SHORTCUT: CTD
- Add and subtract fractions with unlike denominators (5.L.12)      SHORTCUT: TCD
- Convert between percent, fractions, and decimals (5.Q.2)      SHORTCUT: 2VM
- Divide fractions and mixed numbers: word problems (5.N.12)      SHORTCUT: F7C
- Evaluate numerical expressions with parentheses and brackets (order of operation) (5.O.7)      SHORTCUT: TVY
- Add, subtract, multiply and divide fractions and mixed numbers: word problems (5.O.15)      SHORTCUT: APD
- Complete patterns (5.S.2)      SHORTCUT: XPM
- Use a rule to complete a table and a graph (5.T.5)      SHORTCUT: N9B
- Write a two-variable equation (5.U.12)      SHORTCUT: GX2
- Interpret line graphs (5.V.2)      SHORTCUT: UFX
- Find the mean (5.W.2)      SHORTCUT: AAP
- Find the median (5.W.3)      SHORTCUT: GDA
- Interpret charts and graphs to find the median (5.W.11)      SHORTCUT: XWN
- Nets of 3-D figures (5.CC.3)      SHORTCUT: 9LV
- Areas of squares and rectangles with fractions (5.DD.6)      SHORTCUT: PMV

- Area of compound figures (5.DD.9) SHORTCUT: YGC

**Fall 2022 Placement – Seventh-grade Math Accelerated – Complete the following skills in the **sixth-grade section** - No calculators permitted (21 links total)**

- Write multiplication expressions using exponents (6-D.1) SHORTCUT: TY5
- Evaluate exponents (6-D.2) SHORTCUT: XDA
- Find the missing exponent or base (6-D.4) SHORTCUT: HC5
- Divide fractions and mixed numbers: word problems (6-L.8) SHORTCUT: WAH
- Evaluate numerical expressions involving decimals (6-O.8) SHORTCUT: YEE
- Evaluate numerical expressions involving fractions (6-O.11) SHORTCUT: WNE
- Write a ratio: word problems (6-R.3) SHORTCUT: SBQ
- Write variable expressions: two operations (6-Y.2) SHORTCUT: CX9
- Evaluate multi-variable expressions (6-Y.5) SHORTCUT: HC9
- Multiply using the distributive property (6-Y.14) SHORTCUT: 2HH
- Add and subtract like terms (6-Y.18) SHORTCUT: CN9
- Find a value using two-variable equations (6-BB.5) SHORTCUT: 46Q
- Identify the graph of an equation (6-BB.11) SHORTCUT: WN7
- Graph a two-variable equation (6-BB.13) SHORTCUT: TJA
- Interpret a graph: word problems (6-BB.14) SHORTCUT: KZD
- Write an equation from a graph using a table (6-BB.3) SHORTCUT: BCM
- Calculate mean, median, mode, and range (6-HH.2) SHORTCUT: ZZK
- Unit rates (6-R.9) SHORTCUT: JSZ
- Find the total given a part and a percent (6-S.15) SHORTCUT: D6L
- Calculate mean absolute deviation (6-HH.6) SHORTCUT: JUV
- Graph points on a coordinate plane (6-X.2) SHORTCUT: VHQ

**Fall 2022 Placement - Pre-algebra - Complete the following skills in **the seventh-grade section** - No calculators permitted: (20 links total)**

- Add and Subtract Integers (7.C.12)    SHORTCUT: FNS
- Multiply and Divide Integers (7.C.22)    SHORTCUT: R8D
- Add, Subtract, Multiply, and Divide Decimals: word problems (7.E.8)  
SHORTCUT: TGN
- Add, Subtract, Multiply, and Divide Fractions and Mixed Numbers: word problems (7.G.16)    SHORTCUT:KR7
- Write equations for proportional relationships from tables (7.K.2)  
SHORTCUT:6GU
- Identify proportional relationships by graphing (7.K.3)    SHORTCUT: AAN
- Find the Constant of Proportionality from a graph (7.K.4)    SHORTCUT: ZUT
- Write equations for proportional relationships from graphs (7.K.5)  
SHORTCUT: JKH
- Write variable expressions: two or three operations (7.R.2)    SHORTCUT: EGS
- Add and subtract linear expressions (7.R.14)    SHORTCUT: 6BT
- Add and subtract like terms: with exponents (7.R.15)    SHORTCUT:EQA
- Factors of linear expressions (7.R.16)    SHORTCUT: J9G
- Solve one-step equations (7.S.6)    SHORTCUT: WKM
- Solve two-step equations (7.S.7)    SHORTCUT: QEB
- Solve equations: word problems (7.S.8)    SHORTCUT:D2Y
- Solve equations: involving like terms (7.S.9)    SHORTCUT:VSW
- Write a two-variable equation (7.U.6)    SHORTCUT: 94Q
- Identify the graph of an equation (7.U.7)    SHORTCUT: WU5
- Graph a two variable- equation (7.U.8)    SHORTCUT: DQE
- Interpret a graph: word problem (7.U.9)    SHORTCUT: 2V5

**Fall 2022 Placement – Algebra I or Algebra I Honors - IXL Sections (**Algebra I section**):**  
(20 links total)

- Square roots (Alg 1- A.6)      SHORTCUT: JPZ
- Cube roots (Alg 1- A.7)      SHORTCUT: RNT
- Add, subtract, multiply, and divide integers (Alg 1- B.1)      SHORTCUT: UNC
- Evaluate numerical expressions involving rational numbers (Alg 1- B.6)  
SHORTCUT: 8CU
- Evaluate variable expressions involving rational numbers (Alg 1-B.7)  
SHORTCUT: M9A
- Identify equivalent ratios (Alg 1- C.1)      SHORTCUT: 8UE
- Unit Rates (Alg 1- C.3)      SHORTCUT:8FZ
- Solve proportions: word problems (Alg 1- C.6)      SHORTCUT: 8ES
- Convert between percents, fractions, and decimals (Alg 1- D.1) SHORTCUT: UWL
- Percent word problems (Alg 1- D.3)      SHORTCUT:BLW
- Multi-step problems with percents (Alg 1- D.9)      SHORTCUT: HBJ
- Simplify variable expressions involving like terms and the distributive property  
(Alg 1- I.3)      SHORTCUT: ZXX
- Identify equivalent linear expressions (Alg 1- I.4)      SHORTCUT: 6ZA
- Solve equations using order of operations (Alg 1- I.8)      SHORTCUT: 8NT
- Solve advanced linear equations (Alg 1- J.5)      SHORTCUT: 28N
- Solve equations with variables on both sides (Alg 1- J.6)      SHORTCUT: 7S7
- Solve linear equations: mixed review (Alg 1- J.11)      SHORTCUT: DN6
- Find the slope of a graph (Alg 1- S.3)      SHORTCUT: 87D
- Slope-intercept form: find the slope and y-intercept (Alg 1- S.6) SHORTCUT: R5T
- Slope-intercept form: write an equation from a graph (Alg 1- S.8)  
SHORTCUT: 9GW

**Fall 2022 Placement – Geometry Honors (19 links total)**

**IXL Sections (under the **Geometry** section):**

- Triangle Angle-Sum Theorem (G-F.2) SHORTCUT: UBU
- Midpoint formula: find the midpoint (G-B.9) SHORTCUT: 2YG
- Midpoint formula: find the endpoint (G-B.11) SHORTCUT: EUW
- Slopes of parallel and perpendicular lines (G-E.5) SHORTCUT: 6K2
- Equations of parallel and perpendicular lines (G-E.6) SHORTCUT: VEB
- Volume of prisms and cylinders (G-T.5) SHORTCUT: N5F
- Volume of pyramids and cones (G-T.6) SHORTCUT: 7J3
- Similar solids: find the missing length (G-T.9) SHORTCUT: UT7
- Area and perimeter in the coordinate plane I (G-S.6) SHORTCUT: QWZ

**IXL Sections (under the **Algebra** section):**

- Is  $(x, y)$  a solution to the system of equations? (A1-U.1) SHORTCUT: LRL
- Linear equations: solve for  $y$  (A1-S.12) SHORTCUT: T5F
- Multiply two binomials (A1-Z.8) SHORTCUT: M7Q
- Slope-intercept form: graph an equation (A1-S.7) SHORTCUT: UWB
- Slope-intercept form: write an equation from a graph (A1-S.8) SHORTCUT: 9GW
- Solve a quadratic equation by factoring (A1-BB.8) SHORTCUT: CSS
- Solve a system of equations by graphing (A1-U.2) SHORTCUT: TSS
- Slopes of parallel and perpendicular lines (A1-S.25) SHORTCUT: ADB
- Write an equation for a parallel or perpendicular line (A1-S.26) SHORTCUT: 5SH
- Solve equations with variables on both sides (A1-J.6) SHORTCUT: 7S7