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Vierteln regelmäßiger Vielecke

1 Worum geht es?

Wir zerlegen regelmäßige Vielecke ungerader Eckenzahl in vier regelmäßige Vielecke der gleichen Eckenzahl.

Eine Fleißarbeit.

2 Beispiele

2.1 Ein unzerschnittenes kleines Vieleck

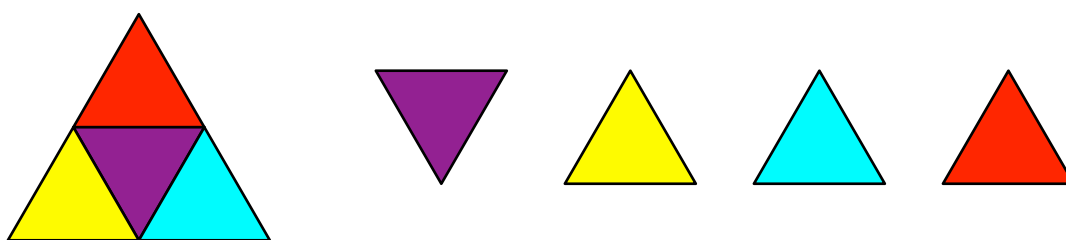


Abb. 1.3: Dreieck

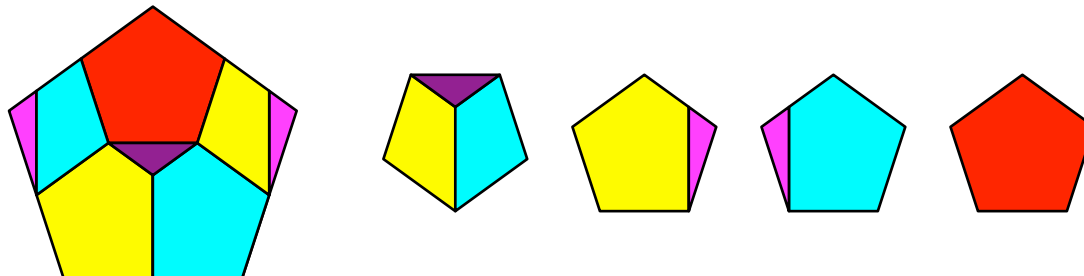


Abb. 1.5: Fünfeck

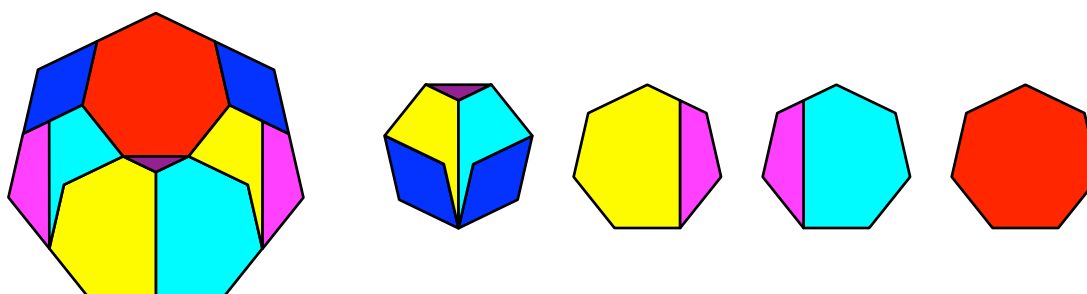


Abb. 1.7: Siebeneck

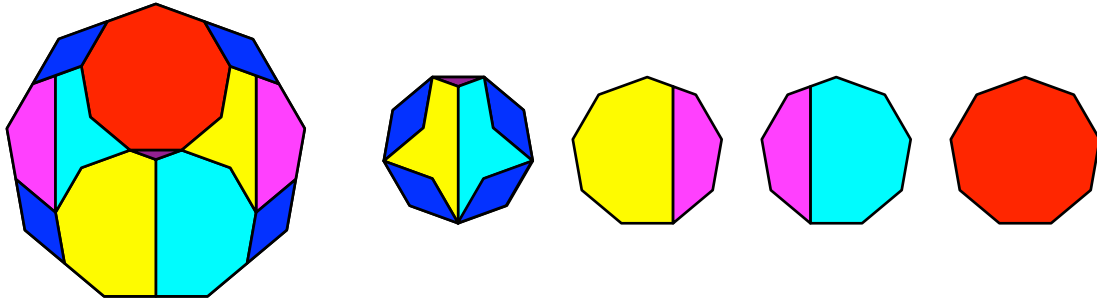


Abb. 1.9: Neuneck

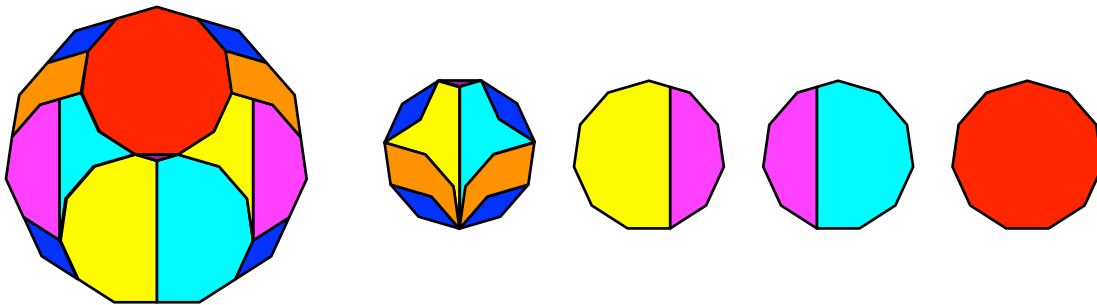


Abb. 1.11: Elfeck

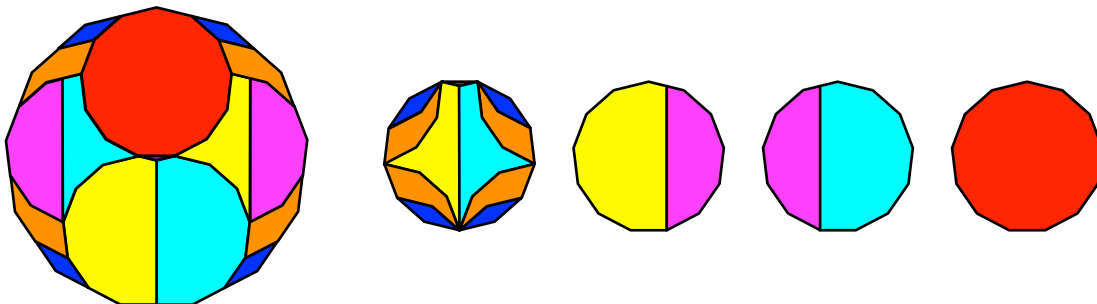


Abb. 1.13: Dreizehneck

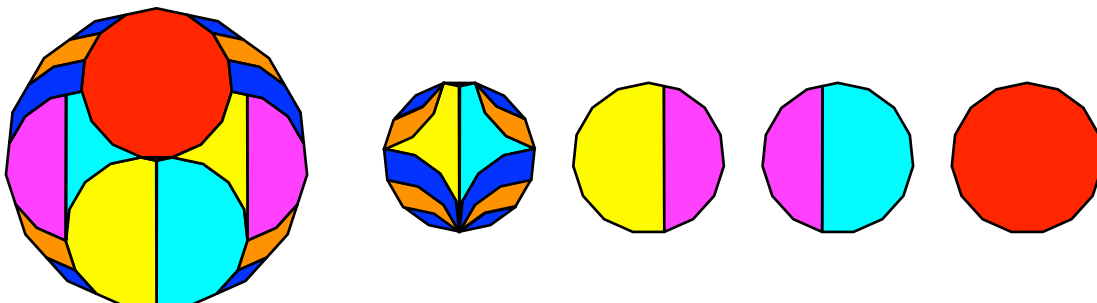


Abb. 1.15: Fünfzehneck

2.2 Zwei unzerschnittene kleine Vielecke

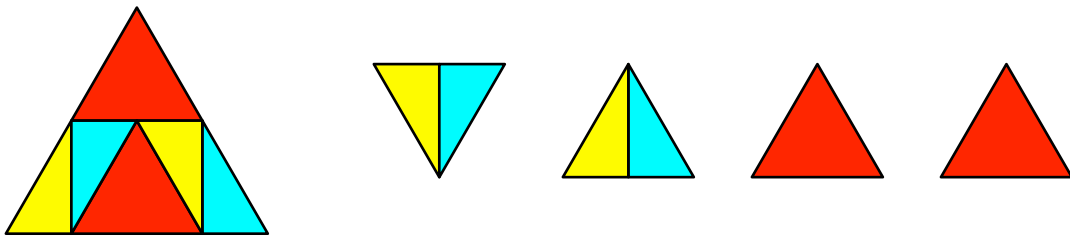


Abb. 2.3: Dreieck

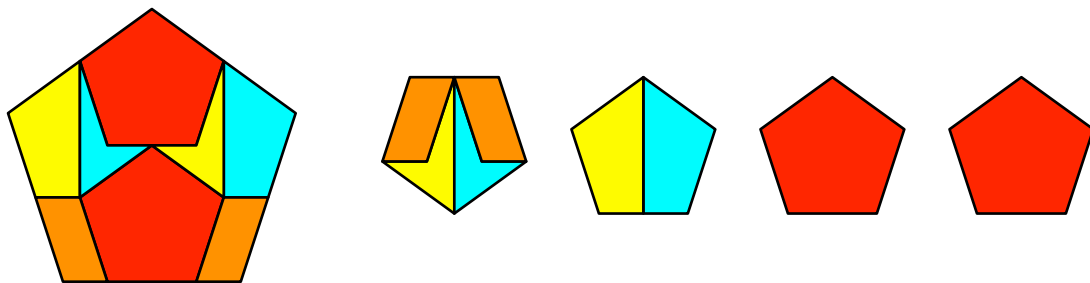


Abb. 2.5: Fünfeck

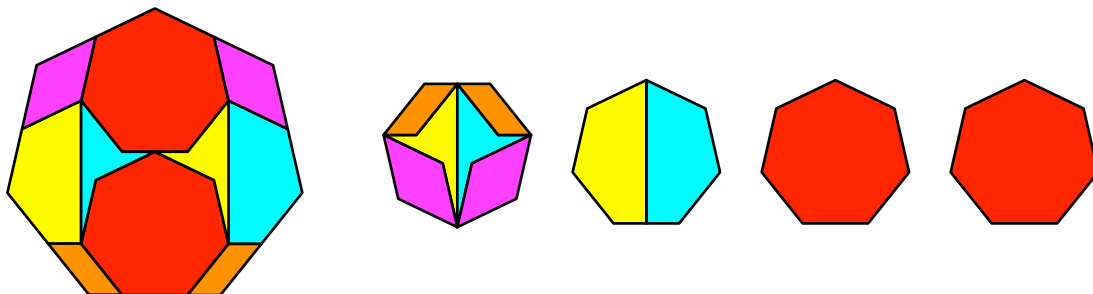
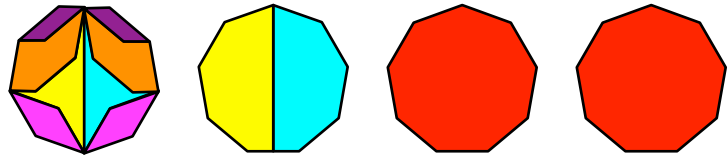
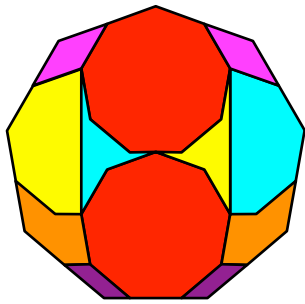


Abb. 2.7: Siebeneck



Ab. 2.9: Neuneck

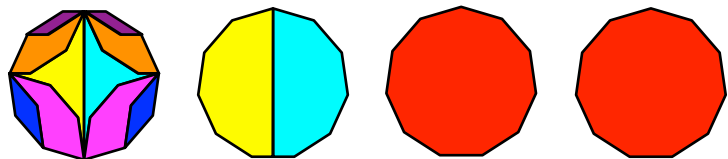
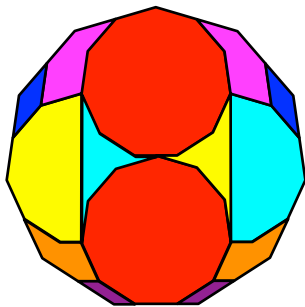


Abb. 2.11: Elfeck

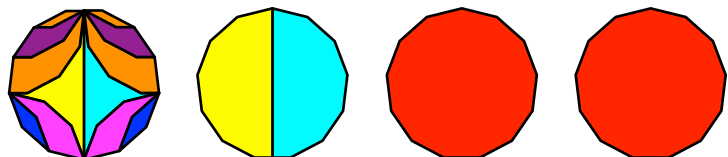
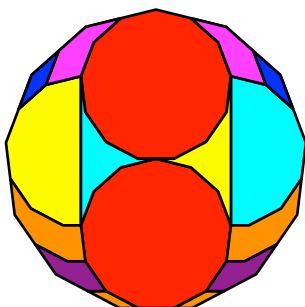


Abb. 2.13: Dreizehneck

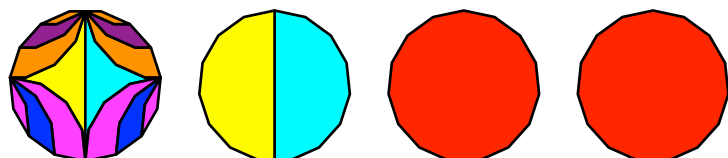
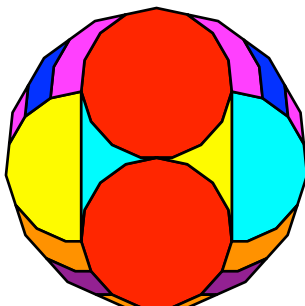


Abb. 2.15: Fünfzehneck

2.3 Dreiteilige Drehsymmetrie

Bei durch drei teilbaren Eckenzahlen geht es mit dreiteiliger Drehsymmetrie.

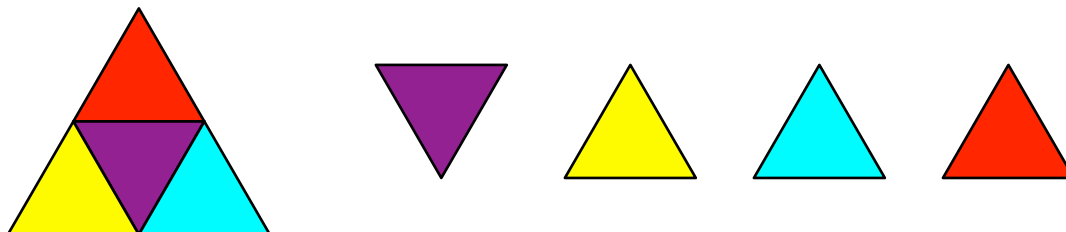


Abb. 3.3: Dreieck

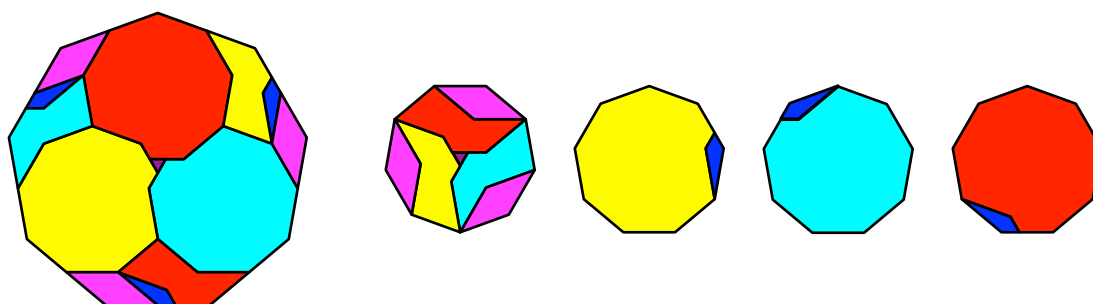


Abb. 3.9: Neuneck

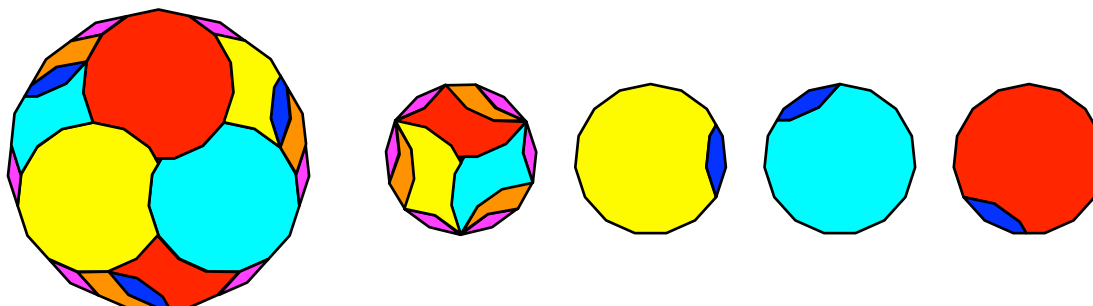


Abb. 3.15: Fünfzehneck

Literatur

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